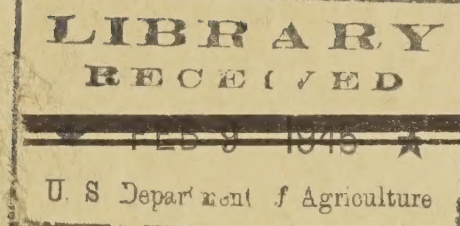


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Our
40th Year

1945

Our
40th Year

DeGiorgi Brothers Co.

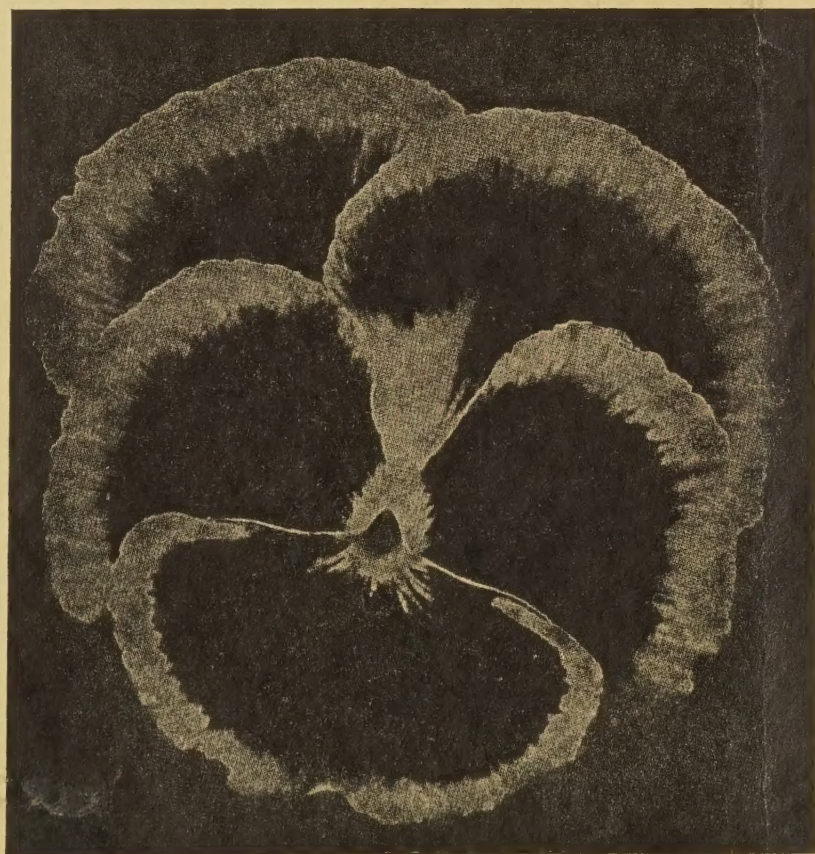
*Seed Growers and Importers
of Strictly High Grade Seeds*

COUNCIL BLUFFS, IOWA

Gardeners' and Florists' Price List

Prize Winning Vegetable Seeds and Choice Florists' Flower Seeds, Seeds of Annuals, Perennials, Climbers and Greenhouse Plants truthfully and fully described with valuable information for Gardeners and Florists

THIS BOOK IS MORE THAN JUST A SEED CATALOGUE



Pansy America

The Finest Pansy in Existence

We Introduced Pansy America

Since the date of introduction we have improved our strain greatly. Those that must have the very best there is in Pansies will find that plants our seed produces, will sell at good prices in spite of severest competition.

One of the proofs that our strain of Pansy America possesses superior qualities is in the fact, that those of our customers that tried other strains from other growers are using our strain again to the exclusion of all others.

FRESH SEED OF PANSY AMERICA is ready late in July. We grow Pansy America for seed on our farm in Minnesota, far North (south of Lake Superior). The climatic conditions are ideal, the seed is plump and of vigorous germination.

QUALITY SEEDS

THIS IS OUR 120 PAGE CATALOG

At prices quoted, we prepay all seeds to any point in United States, Canada, South America or West Indies, except Beans, Corn, Peas, Spinach, and where noted. Terms cash, no discount. No charge for bags or packing. Orders to be sent C. O. D. should be accompanied by one-fourth cash.

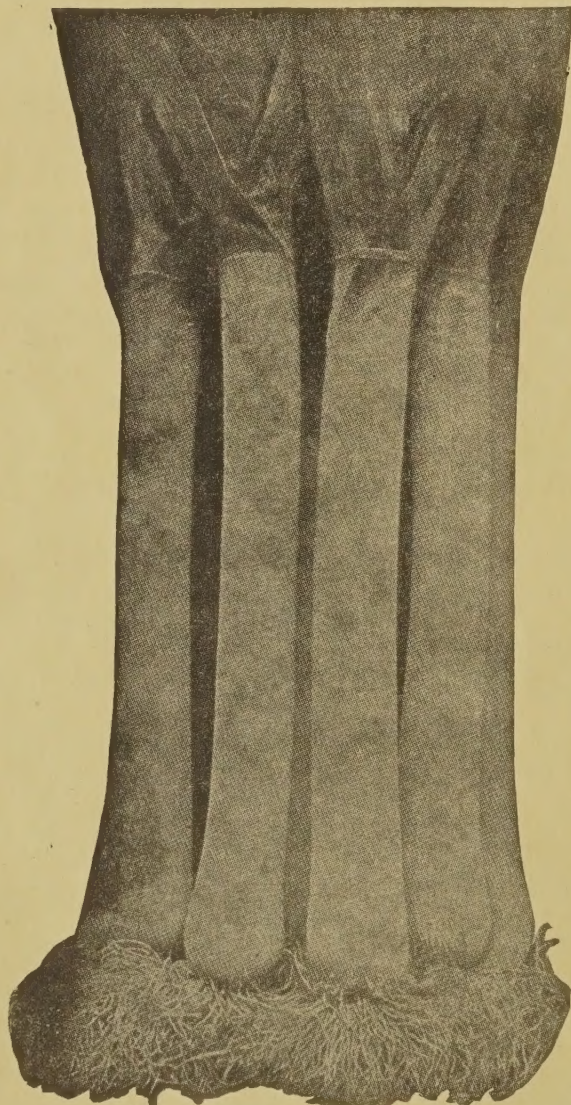
To Our Customers in Foreign Lands

Please remit in United States Funds. Foreign money fluctuates in value; sending U. S. money is an advantage to both parties.

Condition of Sale

All offers are made subject to being unsold upon receipt of order.

In common with seed growers and dealers the world over, we give no warranty, express or implied as to the description, quality, productiveness or any other matter of any seeds, plants or bulbs we send out, and we will not be in any way responsible for the crop. If the purchaser does not accept the goods on these terms they can be returned at once and no sale has been made.



Onion Prosperity

WHO WE ARE—WHAT WE DO

We are seed growers and cater to the most critical trade there is, namely, to market gardeners, truckers, canners and florists. We supply to this critical trade seeds of the highest quality.

We never send out second grade seeds as some may think when comparing our prices with those of others. The best is none too good when it comes to seeds—we know it—and act accordingly.

Using our seeds means to be on the safe side. Our seeds are reliable and favorably known since 1905—in other words, for thirty-nine years.

SAVE MONEY — SAVE WORRY

Address your orders to:

Giorgi-Seeds, Council Bluffs, Ia.

The foremost vegetable and flower growers, amongst them the biggest establishments of national repute, depend for their seed supply on us. Let us get acquainted—a trial order will do this and whether large or small, will be highly appreciated by us, promptly filled and we hope will lead to mutually profitable and increased dealings. Place your orders early. Seeds are not like bricks. Bricks can be had at any time, in any quantity, the supply of clay is unlimited. Not so with seeds. Every year certain seeds are in short supply owing to poor crops. Shortages show as the season advances, order early while the supply is good.

NEW ONION PROSPERITY

A green or bunching variety.
Ready six weeks before Onions raised from sets.

Prosperity Onion will make more money for the gardener than any other crop. It can be marketed long before onions from spring planted sets are ready and thereafter throughout the whole season even in the hottest of weather up to the time when the ground freezes up solidly.

Prosperity Onion forms no bulbs, it is a bunching onion like the Welsh or Egyptian Winter but very much better. The stalks of Prosperity are extra heavy, $\frac{1}{2}$ to $\frac{3}{4}$ inches through, absolutely white for a length of 4 to 6 inches, tender, mild and sweet, fully equal in quality to onions raised from sets, of better appearance and easier to get ready for tying, no skin to peel, all that is needed is to wash the stalks and tie.

It is ready for the market long before rhubarb and asparagus, making an income for the gardener at a time when there is absolutely nothing in the garden that could be turned into money. The grower will have the market to himself and naturally will get paid well. Another time Prosperity Onion will pay exceedingly well is during summer, or whenever there will be demand for green onions and the market bare of it. It is a crop that can be marketed at any time of the year, even after hard frosts, if pulled, stored in cellars and heeled in dirt. In a word there is no crop that will bring as much money to the grower as Prosperity Onion.

Prosperity Onion is raised from seed. You plant it only once and for years thereafter all you will do is to pull, leaving a stalk stand in the row 5 inches apart and this stalk by stooling soon will furnish another crop. Thus a bed of Prosperity Onions becomes a permanent crop, yielding from year to year, every day in the year excepting the dead of winter when the ground is frozen and covered with snow. Prosperity Onion is absolutely hardy, needs no covering of any kind, no protection whatever, it never winterkills.

Besides making money from the sales, you will make money by saving the cost of onion sets and the cost of planting them. With a patch of Prosperity Onion in your garden it will be immaterial to you whether onion sets sell at \$3.00 per bu. or \$10.00 per bu., you have freed yourself from that expense forever and for good. Your only expense will be for seed to give you a start. The first year there will be the expense of pulling the weeds. You can easily, the first year, rid the patch of all weeds and that expense is done with. Your patch will become a sort of a mine. You will thin out the patch and the remaining plants by stooling will in 60 days provide another crop. The rate at which stools are made is from 3 to 8 to each plant. We grow Prosperity Onion in our own fields and write from experience. In our opinion, the plantation of Prosperity Onion is the most valuable crop. Price, Pkt. 10c; oz. 50c; 1 lb. \$5.80.

New method of growing Onion Prosperity. Please turn to page 53 of this catalog.

The News for 1945

There are no shortages of vegetable seeds excepting a few items of which the crop failed. As to flower seeds the situation is changed a good deal from what it used to be and the reason is that many flower seed growers quit growing such flower seeds for which the demand was not heavy. There are quite a few such items of which the seed cannot be had at present.

The year past, orders for seeds reached us in such quantity that it was impossible for us to fill these orders on the day received. We worked overtime, have done our best to send the seeds to customers promptly but we did not succeed in this and the filling of orders was delayed. We hope that those of our customers that did not get their seeds promptly after ordering will kindly excuse us.

QUITE IMPORTANT—PLEASE READ

The war cut us off from connections with the seed growers and seed specialists of Europe. Try as one may it is impossible to secure stocks of seeds that the seed trade is compelled to import. In every case where we will be unable to supply the seed we do not quote prices although we are leaving the description stand in our catalog. In every case where we do not quote the price it means that we do not have that seed.

WE WILL RETURN MONEY

In every case it should develop, for whatever reason that our prices are not what the law allows. Our prices for vegetable seeds are in most cases below ceiling—we have lowered our prices wherever it was possible to do so.



CAULIFLOWER SUPER DANAMERICA (66 days)

Super Danamerica is the finest second early cauliflower in existence. It forms a head that is unusually high, solid, heavy and snow white. Perfectly fixed as to type, yielding under normal growing conditions practically 100% grade one heads. In season only 10 days later than Early King. It heads uniformly throughout the field and the whole crop is ready to cut inside of two weeks. The stalk of Super Danamerica is shorter than in any other variety, the leaves are not spaced but grow as closely together as cabbage, forcing the inner leaves to curl over the head providing perfect protection from unfavorable weather. A very valuable variety to all growers wishing to get a crop of cauliflower just about the time the crop of Early King cauliflower is marketed. Pkt. 20c; oz. \$2.65; 1 lb. \$32.00.

TOMATO VALIANT (70 days)

New. Valiant, although quite new variety is very popular with growers in New Jersey and adjacent states. It is a large tomato, very solid, smooth, heavy of fine quality. Vines of sparse growth therefore subject to sunburn in some sections. Color red, average weight per fruit half a pound, globe shaped. Pkt. 15c; oz. 50c; lb. \$6.00.



CARROT GOLD COIN (70 days)

Gold Coin carrot is fully developed and ready for the market 70 days after date of sowing. The roots are 6½ to 7 inches long, almost an inch through. Very uniform, there is not an "off" root in a bushel. Other good early carrots are not more than half developed at a time, when Gold Coin is ready to sell. Gold Coin can be marketed early and late. Can be left in the ground till late fall and if stored will keep perfectly. Of highest quality, very sweet, of a most pleasant, scented flavor, richly colored orange-red. Pkt. 10c; oz. 50c; lb. \$4.00.

CAULIFLOWER SNOWBALL No. 16

The earliest and surest heading cauliflower of the Snowball type producing round firm snowwhite heads 7-9 inches across. Leaves pale green smooth protecting the head well. Pkt. 20c; oz. \$2.65. (52 days.)

CELERY MICHIGAN GOLDEN (120 days)

Yellows Resistant Self Blanching Celery, a pedigreed strain intermediate in type between Tall Golden and Golden Plume and bred by plant pathologists of Michigan State College for resistance to yellows. Highly resistant to yellows, also known as root rot, crown rot, "sickness" and stunt and can be grown successfully in soils infested with yellows fungus where other celeries are seriously affected. Is not resistant to other celery diseases and seed treatment, together with the use of protective dusts or sprays, must be relied upon to control leaf blights. Pkt. 10c; oz. \$1.00.

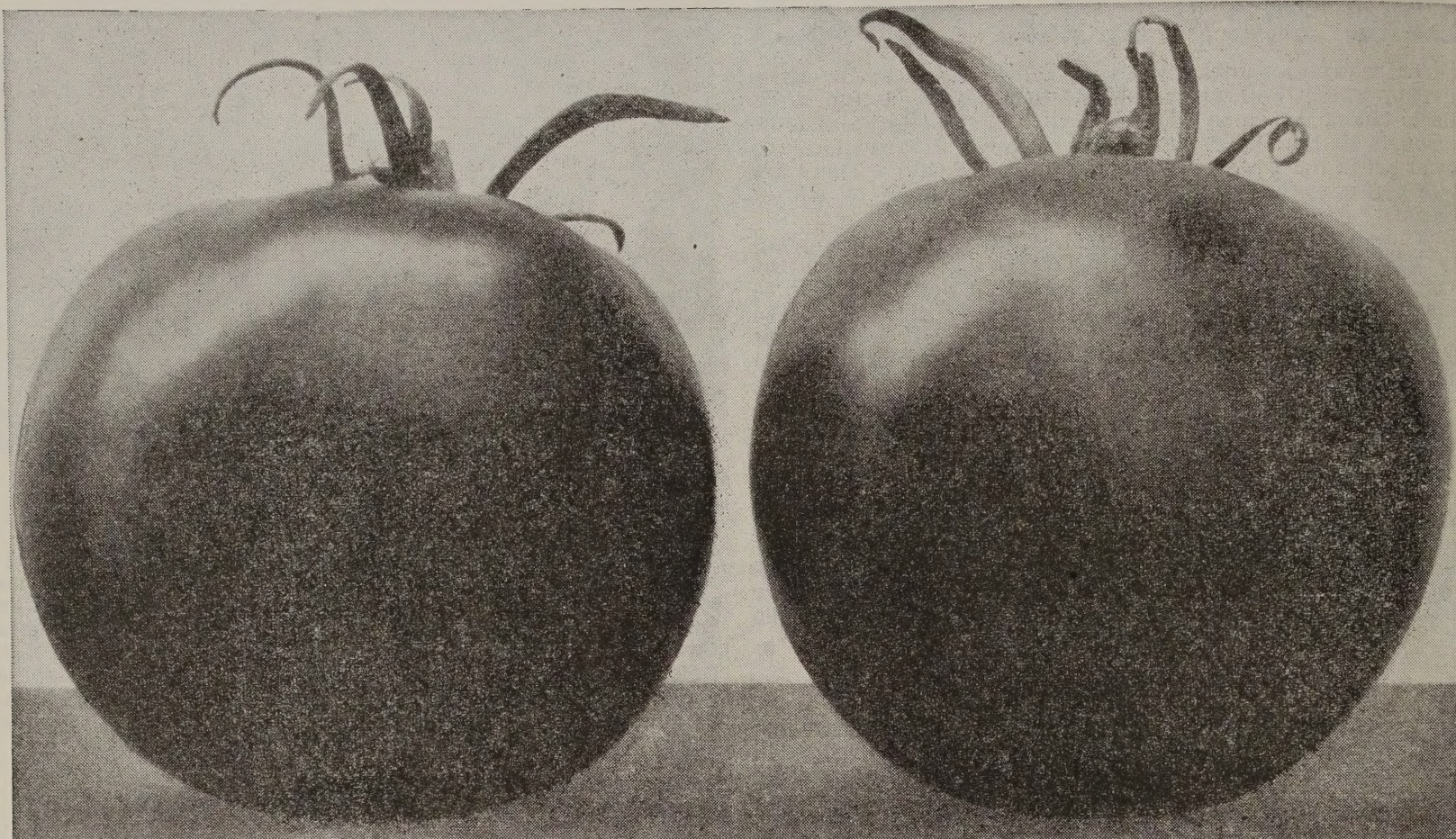
FULL HEART PASCAL (112 days)

An extra early green celery that blanches easier and quicker, either when blanched with boards or in the row with dirt. Plants 25-27 inches tall, ribs 8-10 inches long, thick and smoothly rounded with the inner stems creamy white. Hearts as full as is possible to grow, large, firm and tender. A most desirable sort. Resistant to fusarium yellows. Full Heart Pascal was originated by a celery grower with years and years of experience. We recommend this variety highly. Pkt. 15; oz. \$1.20; lb. \$16.00.

CELERY CRISPHEART (112 days)

Of all "green" celeries about the easiest to blanch. Plants compact with medium dark green tops. Height in California 25 to 29 inches overall and 7 to 10 inches to joint, mostly 8 to 10 inches. Eastern reports show height varying from 18 to 28 inches according to conditions. Plants have ample girth, the extreme outer stems are narrow but when striped for market show only broad, very thick stems, a compact formation and creamy blanch. It is crisp and free from strings. Flavor is rich yet mild. Blanches readily enough to be fit for market after being papered for 3 or 4 weeks. Pkt. 10c; oz. 50c; lb. \$5.00.

THE QUALITY of our seeds is the very best every time in all cases. In actual field trials we find that our seeds are the equal and in MANY cases of better quality than seeds from other sources. Lower prices asked by us NEVER mean low quality. Our policy is to give the customers most for their money.



Tomato Firesteel (67 days)

A SENSATIONAL NEW TOMATO

Of all red tomatoes Firesteel is the king. There is NO variety at present whether early or late that can be compared with Firesteel.

Firesteel was originated by Mr. Clare Barber of Firesteel Gardens, Mitchell, S. D., by crossing Marglobe with the variety Bison. The fruit of Firesteel is larger than the fruit of any other variety and in size is comparable only to the variety Ponderosa. It is a globe, ripens a fine dark crimson red all over at the same time. It is absolutely smooth, exceedingly solid and meaty and the best flavored tomato we have ever eaten, free from acidity, fine for juice and unbeatable as a slicer. Individual tomatoes weigh from 12 to 15 ozs. and are borne in clusters of three to five. The tomatoes are of immense size not only at the first picking but clear to the end of the season. There are hardly any small tomatoes. Vine medium, vigorous, fairly open with medium foliage. The vines will set on a heavy crop of fruit no matter how hot and dry it gets. In actual trials conducted by Mr. Barber in 1937 a year that will be remembered for a long time as hot and dry, Firesteel produced 11 bushels of tomatoes per row. Under the same identical conditions Bison went 4½ bu., Penn State 2¼ bu., John Baer about a peck while a number of other varieties failed to set any fruit at all.

It is no overstatement when we say that Firesteel is the King among tomatoes. Our opinion is shared by our friend, Mr. H. Linden, who has fifty years of experience as a market gardener and "knows tomatoes." Pkt. 15c; oz. 80c; lb. \$8.00.

A GROWER FROM IOWA SAYS: "Firesteel ripens deep red clear to the stem. Ninety out of a hundred fruits are of uniform size—a deep globe free from cracks at the stem. There is no tomato that can anywhere near compare with the quality of this most out of the ordinary variety. It is the greatest yielder of any tomato that I know of, averaging five market baskets of perfect fruit per plant." Even at only 15 cents per market basket it is a sure mortgage lifter.

A LETTER FROM NEW YORK written on July 29, 1939, by one of our customer says: "In a trial of 18 varieties of tomatoes, Firesteel is by far the most promising. It is a knockout so far."

A LETTER FROM KANSAS addressed to Mr. Clare Barber and written by one of the largest growers of vegetables in the state of Kansas, says:

"I put out about one-third of my acreage to Firesteel. It gives me much pleasure to report that they are the finest tomato that I have ever found or expect to find. For size, beauty, heartiness, quality and yield they surpass the Bison, Allred and other new and standard varieties so far, there is no comparison.

"I intend to set out a large acreage of Firesteel tomatoes next spring and no other variety.

"The weather this summer has been exceedingly hot, dry and windy, with two hail storms. But where I got plenty of water on them the Firesteels are making an elegant yield and fine quality. Other varieties are hardly worth picking.

"In originating the Firesteel tomato you have certainly conferred a real benefit on mankind."

Because the vines of Firesteel are only medium heavy, plant Firesteel in the field by 3½ ft. x 2½ ft. The vines of Firesteel are covered with fruit, no time is lost looking for tomatoes in heavy foliage. The fruit is in plain view.

SWEET CORN ARISTOGOLD HYBRID No. 1 (83 days)

Aristogold was grown for trial in many parts of the country. The following are a few reports. In Connecticut it was rated "Good." In Florida yielded 658 lbs. more marketable ears than Golden Cross Bantam. In Maryland compared favorably for flavor and tenderness and yield advantage run from half to more than one ton per acre. In New Jersey it was found quite drought resistant of good vigor with ears 9 inches long. In Pennsylvania it earned a general rating of "Excellent." In Washington it was found: One of the most promising hybrids in the test grounds. It matured with the Golden Bantam Gross entries and out-yielded them all. Description: Stalks 8-9 ft. tall with dark green leaves and husks. Ears uniform and symmetrical, extra long 12-14 rowed. Kernels deep rich yellow. A quality corn resistant to ear worm and smut damage, yielding heavily even under adverse conditions of drought and heat because of its deep root system. Will stand earlier planting in cold wet soil than other types. Pkt. 10c; lb. 60c, prepaid. F.O.B. In lots of 5 lbs. or over 42 cents per pound. 100 lbs. \$40.00.



CELERY—FLORIDA GOLDEN (118 days)

Of the Golden Plume type and season, but a very great improvement over that variety. Possesses greater height and weight of plant and the edible part of the stem is larger. In Florida this celery has a height of 22 to 24 inches and the length of the edible stems is in Florida 8 to 9 inches. The foliage of Florida Golden is slightly darker green than Golden Plume, the stems are broad, thick, solid, the plants full hearted and very compact, blanching to a rich cream color. We recommend a trial of this new celery to growers everywhere. Resistant to root rot also known as yellows. Pkt. 10c; oz. 80c; lb. \$8.00.

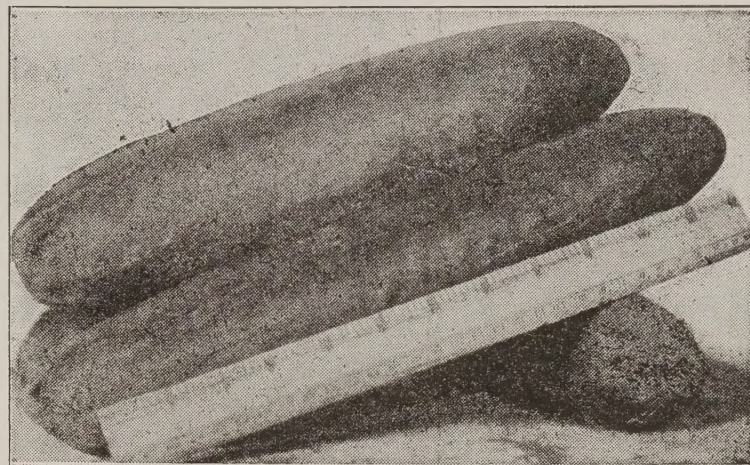
POP CORN SQUAW HULLESS

Pops snow white as much as one inch across and is of a delicious flavor. Stalks 6 feet tall, two ears to a stalk. Ears 8 inches long or over. The kernels are large, smooth, flat, resembling the kernels of flint or "squaw" corn. From 3 to 4 weeks earlier than Japanese Hulless. Pkt. 10c; lb. 30c, prepaid.

CUCUMBER MARKETER (65 days)

New. Those that know cucumbers say that Marketer is the finest slicing cucumber for the market that has ever been produced. Fruits 8 inches long and 2¼ inches in diameter, slightly tapered to each end, very dark green in color, notably uniform and trim in appearance. Vines very vigorous and very heavily productive. Because attractive in appearance and an exceptionally heavy cropper it is a variety that pays to grow. Pkt. 10c; oz. 40c; lb. \$4.00.

We sell half and quarter pounds at pound rate, 5 pounds or over at 10 pound rate, 25 pounds or over at 100 pound rate.



CUCUMBER TRIUMPH (60 days)

Extra Early—Extra Good

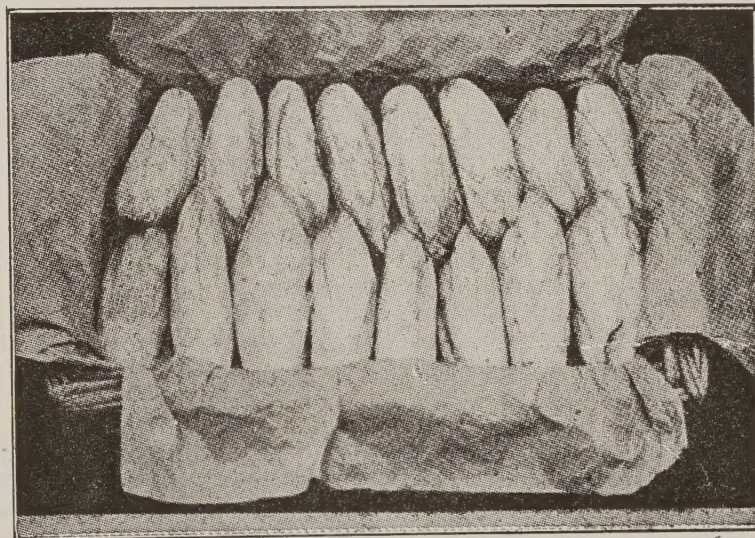
A beautiful long, slender dark green cucumber retaining its color longer than any other cucumber and commanding a premium on the critical markets. It is a vigorous, productive variety highly resistant to unfavorable growing conditions. A very fine slicing variety. Length of fruits 10 to 11 inches. Pkt. 10c; oz. 20c; lb. \$2.80.

CUCUMBER LINDEN'S MARVEL (62 days)

Linden's Marvel cucumber is one of the finest for slicing. Fruit extremely handsome, averaging 10 inches in length, smooth, straight, of deep green color, ends rounded not pointed. The dark green color lasts for 10 days or more, making it valuable for shipping. Vines vigorous, blight resisting, heavily productive. A white spine variety. Pkt. 10c; oz. 20c; lb. \$2.80.

HYBRID SWEET CORN SPANCROSS

(SPANCROSS C 134)—One of the best first early hybrids ready 72 days after planting. Stalks about 6 feet tall, ears 10-12 rowed, well tipped, kernels golden yellow, sweet and tender. Produces a heavy crop of ears in all parts of the country. Highly resistant to bacterial wilt. Pkt. 10c; lb. 50c, prepaid. Not prepaid: In lots of 5 lbs. or over 42 cents per pound.



WITLOOF CHICORY TRIUMPH

Produces extra large solid heads that blanch snow-white, are very uniform and every root produces salable head. Triumph is a superior new variety fetching high prices on the market. Pkt. 10c; oz. 45c.

You can order all seeds priced at 45 cents per ounce or over in quarter and half ounce lots at ounce rate. Quarter and half pounds at pound rate. Five pounds or over at 10 pound rate. 25 pounds or over at 100 pound rate.



NEW PEPPER 16 TO 1

Extra Early—Enormous in Size—Immensely Productive

This pepper will be found to be an exceptionally valuable variety because extra early, yielding fruit of maximum size in hardly believable quantities. Full grown fruit measures $6\frac{1}{2}$ to 7 inches long and $3\frac{1}{2}$ to 4 inches in diameter. It is 3 and 4 lobed, pendent, smooth of attractive dark glossy green, changing to bright crimson at maturity. Flesh quite thick sweet and mild. Plants vigorous, upright, carrying the load of fruit well above the ground.

Withstands bad weather conditions. In 1940 there was a severe dry spell in our locality. Pepper plants suffered from blight, shedding their leaves and suffering from a check in growth. The plants of 16 to 1 were almost untouched. There were no more than about 10% of plants affected while the plants of other varieties suffered from blight to the extent of 50%.

A few prominent growers in our locality tried 16 to 1. All were greatly impressed with its performance. Their opinion summed up is aptly expressed in saying that 16 to 1 is a knockout. Nothing like it was ever seen before. Never were peppers seen the size of 16 to 1, never so many peppers on a plant and this ahead of ALL large fruited varieties. A standard market basket is easily filled up to the handle with but from 16 to 18 peppers, larger in size than shown in our illustration. One of the growers set out 52 plants for trial. The soil was sandy, far from rich. However artificial fertilizer was used. From these 52 plants he sold over \$22.00 worth of peppers. The bulk of the crop was sold for rather a low price. The last picking from these 52 plants, just before killing frost, was 7 bushels and 3 market baskets of large first class peppers. If you should not desire peppers of giant proportion gather the fruit when of smaller size, the size as shown in our illustration of which you will find plenty on every plant throughout the season.

Compared to our Goliath pepper, 16 to 1 is not quite the equal when it comes to thickness of flesh. Goliath is a pepper with a thickness of flesh that is not found in any other large fruited extra early variety. For that reason Goliath will stay among the leaders for a long time.

Pkt. 15c; oz. \$1.00.

CELERY MASTERPIECE (118 days)

A distinct and superior early self blanching variety with excellent quality of green varieties. Normally 24 to 26 in. tall, with thick stems 8-9 inches long, broad and straight with rounded edges. Almost free from strings, crisp, fleshy, rich in flavor. Blanches to clear cream color. Very satisfactory for early use or for storage. Originator's seed. Pkt. 20c; oz. \$1.60; lb. \$20.00.

ALPHAGOLD HYBRID SWEET CORN (59 days)

Originated by an old, well established and reliable seed growing concern and the following is the originators' description: The rapid growth of this first early yellow hybrid will surprise you. It is safe to plant it even a week earlier than ordinary sweet corn. Although designed to be first on the market, the yield is good, with 10 to 12 rowed ears seven inches long. The tips are well filled and uniformity excellent. Unlike many extra early types which are susceptible to smut Alphagold shows good resistance and makes clean, fine quality crops. Pkt. 10c; lb. 65c, prepaid. Not prepaid: 10 lbs. \$4.70; 100 lbs. \$44.00.

We sell half and quarter pounds at pound rate, 5 pounds or over at 10 pound rate, 25 pounds or over at 100 pound rate.



CAULIFLOWER EARLY KING (54 days)

Larger, much deeper through and more solid than Snowball or any other early cauliflower.

It heads up evenly, the whole crop can be cut and marketed in two weeks. Produces a larger percentage of perfect heads than other varieties even on rather poor soil and under adverse conditions. Practically disease free. The head of Early King is exceptionally high with the curd standing out in relief like a ball. The inner leaves of Early King curl in at the top, closely enveloping the head and excluding rain water and any possible harm by unfavorable weather. The head is thus perfectly protected until it reaches a size of five inches across at which stage it is time to start tying. Few days after, the heads are of marketable size. If left standing the head will soon attain a size of ten inches across. The outside leaves are very dark green with stout ribs and slightly shorter than those of most other varieties, yet ample to give the heads full protection. Pkt. 20c; oz. \$2.65; 1 lb. \$32.00.

LETTUCE GREAT LAKES (83 days)

A heading variety of the Iceberg type. Heads of good size, leaves large and well folded. Considerable resistance to tipburn and great ability to head in hot weather. Recommended as a profitable sort to grow for local marketing. Pkt. 20c; oz. 60c.

CARNATION PRAGUE GIANT

Much more than just another new carnation. Of all hardy carnations this is the finest. The plants are of robust growth carrying on stiff wiry stems extra double, well formed fragrant flowers two inches across in many shades of the most lovely pink besides all other straight colors. These flowers supported by stalks, so strong and rigid that not a single bloom leans towards the ground, touch one another at an even height in such a fashion as if arranged by the hand of a skilled florist into a big bouquet of such a beauty that when seen by a flower lover some of the plants will be seen no more by the grower—they will be sold and carried away. It is this upright even growth that makes Prague Giant the king of hardy carnations. No other carnation can compare with it in this respect. For several years we had plantations of Prague Giant on one of our seed farms but never gathered a single seed, had to sell the plants to visitors. Our telling them that the plants are a seed producing crop was of no use. They begged for the plants and we had to sell. **CULTURE:** Sow in spring, transplant in summer, to get blooming plants in spring. Will winter without protection. If you will place Prague Giant in pots, force gently and bring the plants into bloom in May and then to market, we assure you that you will sell the plants and will not have enough to satisfy the demand. You will positively lose if you will not plant PLENTY of Prague Giant. Outdoors Prague Giant blooms early in June to July, the seed produces about 90% double flowers. Height 15 inches.

GREEK AND LATIN—in seed catalogs is used because world wide connections, seedmen buying and selling seeds in all parts of the world. No matter of what nationality the seed seller or the seed buyer may be, he understands these Latin and Greek names. A Japanese seed dealer for instance, would hardly understand the meaning of the word "columbine" but he knows and so does the Russian, German, etc., what "aquilegia" means. The Greek and Latin becomes the standard language that enables the seedmen, also the botanists, to understand each other. Without this, international trading amongst seedmen would be almost impossible. Some words listed below end with an "a," "s," or "m." Alba, albus, album. But it always means the same; namely "white."

Terms not included in the list below are terms of which the meaning is unknown, therefore cannot be translated.

arvensis—common in fields
 acaulis—stemless
 affinis—related
 album—white
 alpinum—from high mountains
 alternifolius—alternate leaved
 amellus—home on the hillside
 anethoides—dill-like
 angustifolia—narrow-leaved
 argentea—silvery
 arenaria—sand loving
 auricula—ear-shaped
 auratum—golden
 aurantiacus—orange-yellow
 arborescens—tree-like
 atrocoeruleus—dark scarlet
 autumnalis—fall blooming
 azurea—sky blue
 biennis—biennial
 barbatus—bearded
 caespitosa—tuft forming
 coronaria—for use in wreaths
 cordifolius—leaves heart shaped
 columbaria—colombo-pigeon.
 Pigeons it was believed liked the seed.
 cyanus—blue
 coerulea—dark blue
 coelestis—almost divine, sky blue
 cruentus—bloody
 cephalotes—head-shaped
 capitata—like a head, clustered
 caudatus—tail-like
 corollata—garlanded
 coccineum—scarlet
 callilepis—charming
 calycanthema—two calyxed
 candidissima—whitest
 caesius—steel blue
 chalcidonicum—scarlet
 digitata—fingered
 dioica—dual
 dealbata—whitish
 deltoides—shaped like a D
 dissitiflora—profusely blooming
 damascena—from Damascus
 elatior—tall
 elegans—ornamental
 eximium—outstanding
 excelsior—stately
 falcatus—sickle-shaped
 fimbriata—fringed
 floribunda—floriferous
 fragilis—fragile
 frutescens—shrubby
 flexuosus—twisted
 flore pleno—double flowered
 flammula—flaming red
 grandiflora—large flowered
 grandis—great
 gracilis—slender
 glaucum—grayish
 gymnocarpa—smooth seeded
 glomerata—bunched
 globosa—globular
 humilis—low, humble
 hispida—shaggy
 hybridum—mongrel
 heterophylla—diverse leaved
 incana—grayish
 indivisa—indivisible
 insignis—remarkable
 lusitanicus—from Portugal
 luminosa—luminous
 latisquama—broad-scaled
 latifolia—broad leaved
 lutea—yellow
 longifolia—long leaved
 lignosa—woody, shrubby
 laevis—smooth
 lanceolata—lance shaped
 lucidus—shining
 monstrosa—unusual
 muricata—soft spined
 maxima—largest
 major—large, great
 macrophylla—large leaved
 maritimus—from the coast
 magnifica—great
 multiflora—many flowered
 maculata—spotted
 muricata—roughened

montana—mountain (adjective)
 minimum—smallest
 microphylla—small leaved
 mirabilis—admirable
 margaritacea—pearl-like
 moschata—musk scented
 malacoides—bad shaped
 nana—dwarf
 napellus—root beet-shaped
 nebulosa—cloud-like
 noctiflora—night blooming
 nigrescens—blackish
 nivalis—snowy
 nudicaulis—smooth-stalked
 nobilis—comely
 neglectus—overlooked
 nemorosa—home in rocky soil
 ovatus—egg shaped
 oblongata—oblong
 orientale—oriental
 officinalis—medicinal
 occidentalis—western, European
 ptarmica—sneeze causing
 podaricifolia—dense leaved
 paniculata—irregularly branched
 persicifolia—peach leaved
 picta—picturesque
 pycnostachya—long spiked
 pudica—bashful
 procumbens—trailing
 pennata—feather-like
 pulcherrima—very beautiful
 pulchellus—charming
 pungens—sharp, pungent
 plumarius—teaseled, feather-like
 pseudo—misleading, false
 pompon—beautiful
 praecox—early
 palustris—from swamps
 pumillum—little
 pyramidalis—pyramid like
 patulus—outstretched
 patens—open
 polyphyllus—many leaved
 rupestris—gravel loving
 rotundifolium—round leaved
 recta—upright
 rostratum—beak possessing
 retusus—notched at the apex
 retro—circular
 repens—creeping
 ramosum—many branched
 rubrum—red
 rosea—rose pink
 rugosa—wrinkled
 suaveolens—fragrant
 saxatile—home in the woodland
 stolonifera—spreading—stooling
 speciosa—gorgeous
 sylvestris—from woods
 sanguinea—blood red
 spica—spike
 scariosa—rare
 semperflorens—everblooming
 sempervirens—evergreen
 sempervivum—ever alive
 serrata—saw toothed.
 sinuata—wavy
 superbus—magnificent
 simplex—single
 stricta—straight, rigid
 saxatile—indigenous to rocks
 setosa—bristly
 tomentosa—velvety
 tenuifolium—slender-leaved
 trichophylla—hair leaved
 tinctorius—dye producing
 tomentosa—velvety
 uliginosum—dampness loving
 uvaria—bunched
 veris—spring flowering
 versicolor—changing color
 virgatum—switch-like
 vulgaris—common
 vaccaria—found in pastures
 venosa—veined
 variabilis—changeable
 villosum—hairy
 vera—true, genuine
 vernalis—youthful, spring (adj.)
 verticillatus—whorled
 viridia—green

ACROCLINIUM SENSATION GIANTS

New. First class, important Florists flower. Flowers fully double 3 inches across in shades of rich deep as well as light pink borne on long stems. Quite often a single stem carries a cluster of 6-8 flowers closely resembling in appearance, a Comet type of Aster. Early blooming. Annual. Height 28 inches. T. pkt. 10c; oz. \$1.00.

ARABIS SNOWCAP Plants very compact, only 8 in. tall, covered with shining snow white bloom, producing an effect of small drifts of snow. T. pkt. 15c; ¼ oz. 40c; oz. \$3.00.

AQUILEGIA IOWA GIANTS

Flowers of immense size 4 to 6 inches across leaving the old spurred hybrids far behind in effectiveness. This strain was developed by ourselves and so far the colors are: blue, pink, scarlet and white. Height 3 ft. MIXED. T. pkt. 15c; ¼ oz. 30c; oz. \$2.00.

ASPARAGUS VEIL OF LACE

(Asparagus Pseudoscaberr). Here is a real find. A hardy Asparagus producing several times the quantity of beautiful material for the florist than Sprengeri does. Of vigorous growth, absolutely hardy anywhere in good garden soil with a full exposure to the sun. Space the plants 3 feet apart. Height 4 feet. Seed of our own growing. 20 seeds for 25c.

SNAPDRAGON GIANT GOLDEN ROD

Of all Snapdragons Golden Rod is the most vigorous grower and will produce a crop of flowers under the most trying conditions. It is a new type of snapdragon and we say: Try it. Flowers large, bright golden yellow on unusually thick, erect spikes that stand up like rods. Plants base branching, 26 inches tall. Almost 100% rust resistant. T. pkt. 15c; ¼ oz. 25c; oz. \$1.80.

ASTER PRINCESS

New. Wilt Resistant, very attractive cutting type of Aster very free blooming. Flowers have a full deep crested center surrounded by several rows of dainty plume-like guard petals 3 to 3½ inches across on strong stems. In bloom in mid August. Height 2½ ft. PEACH BLOSSOM, SALMON ROSE, CINNABAR-SCARLET, MIXED. Any color: T. pkt. 15c; ¼ oz. 30c; oz. \$2.00; lb. \$20.00.

CELOSIA ROYAL VELVET

Plants 2 ft. tall producing one center stalk carrying a large comb with many long stemmed basal branches with combs of smaller size which are borne erect and are of the richest, brightest imaginable crimson. T. pkt. 15c; ¼ oz. 30c. CELOSIA FLAME OF FIRE—Plant pyramidal with many branches bearing large almost round feathery combs of fiery scarlet. Very showy. Height 20 in. T. pkt. 15c; ¼ oz. 30c.

MARIGOLD SPRY

Plants compact only 9 in. tall, in bloom 2 months from date of sowing and a huge bouquet all summer till frost. Flowers double 1½ in. across, clear yellow with mahogany-red guard petals. High class for beds, borders and as a pot plant for winter bloom. T. pkt. 10c; oz. 60c.

MARIGOLD GOLDEN HARMONY

Plants foot high, compact, covered from June to frost with chrysanthemum-like elegantly formed flowers 2 inches across, of luminous golden yellow color. Comes 100% double. This is an excellent variety which cannot be said of many other marigolds. T. pkt. 10c; oz. 60c.

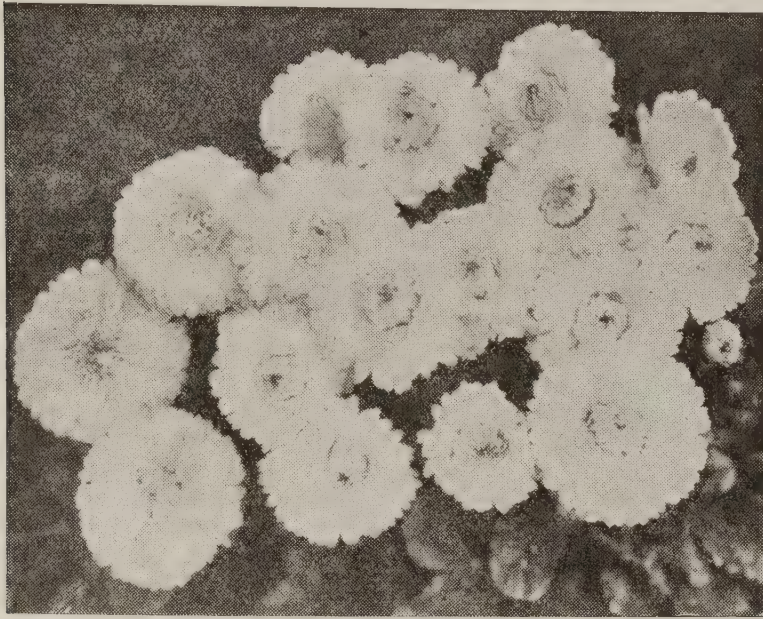
MARIGOLD POT O' GOLD—This is one of the finest and earliest of Marigolds coming into bloom early in June, producing sweet scented very double flowers that are 4½ inches across of intense dazzling golden yellow color. Plants neat and compact 15 inches high. T. pkt. 10c; ¼ oz. 25c; oz. \$1.20.

PENTSTEMON SCARLET BUGLER

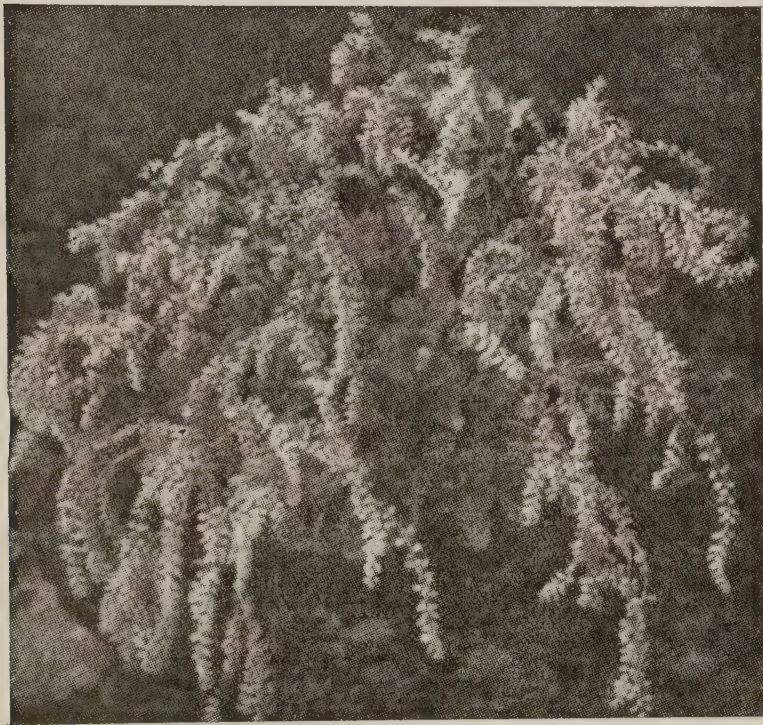
Produces in May and June spikes of bright scarlet bloom and will prove a good seller when placed on the market while in bloom. Perfectly hardy. Height 18 inches. T. pkt. 20c; ¼ oz. 50c.

VERONICA ROYAL BLUE

A superior variety owing to its very bright, very dark blue flowers that are well spaced on well formed, elegant long spikes. In bloom from June to September, perfectly hardy, 30 in tall. T. pkt. 15c; ¼ oz. 30c; ½ oz. 50c.



BELLIS FUSELIER—Very high class. We urge a trial. Also do not overlook the new variety **American Beauty**. Fuselier has double flowers 2 to 2½ inches across, fine stems, flowers fine for flower work when cut in pink and white. **MIXED.**



COTYLEDON SIMPLICIFOLIA

Hardy perennial. Blooms in July and August, the bloom covering the whole plant with overhanging branches, thick set with small ball shaped deep yellow flowers. First rate for rockeries, bedding and borders. The seed which is very fine germinates in 2-3 weeks after sowing. Sow in shallow pans or pots, press the seed to the soil, cover with glass but do not cover the seed with dirt at all. Height 20 in. T. pkt. 60c.

MARIGOLD SCARLET GLOW

Flowers two inches across, double of brilliant scarlet. Plants compact 10 inches high producing flowers 10 weeks from seed. T. pkt. 20c; ¼ oz. 40c.

LIATRIS SCARIOZA WHITE—Plants of bushy growth with several stalks of large double pure white flowers from top to bottom, that come into bloom all at the same time. Very effective in the garden and perfectly stunning for cutting. In bloom in July and August. Hardy perennial. Height 5 ft. T. pkt. 30c.

PENTSTEMON UTAHENSIS

Produces in May and June quantities of large pyramidal spikes of tubular, pendent flowers of pleasing shade of lavender-blue. Excellent for cutting. Hardy perennial. Height 20 in. T. pkt. 25c; ¼ oz. 40c.

PETUNIA GLAMOUR

Selection from the Giants of California group and easily the most striking Petunia we have ever seen. Color luscious shade of salmon-rose delicately veined brown in a creamy open shallow throat. Flowers heavily ruffled 5 to 6 inches across freely produced on plants 18 to 20 in. tall. T. pkt. 50c; 1/64 oz. \$1.00; ½ oz. \$1.85.

PETUNIA MARS

Bedding variety of spreading habit. Color of a deeper crimson than Flaming Velvet and of larger size. Several shades deeper in color than Gen. Dodds. T. pkt. 20c; ¼ oz. 35c; ½ oz. 60c; oz. \$4.00.

CLIVIA HYBRIDA

If you are looking for a flower far from common possessing rare beauty, you want Clivia. The plants can be sold as fast as produced at grower's own price. Resembles large flowered Amaryllis, the plants not quite as tall and the foliage highly attractive the year round. Flowers fragrant in shade of scarlet and red as well as orange in great umbells during winter. The seed we offer is saved from new dwarf hybrids by a European specialist.

CULTURE—Sow in flats, space seeds 5 inches apart, cover lightly, use soil composed of one-half leaf mould, one-half sod soil with some sharp sand. During winter keep in a temperature around 60, during summer keep the plants outdoors. Unlike Amaryllis, Clivia requires liberal watering at all times, plenty of light and air. When the bulbs reach the size of a hen's egg pot them up using 5-6 inch pots. The seed lays 6 to 8 weeks before it germinates, it takes 2-3 years before the plants reach blooming size. Tender bulbous plant. Height 15 inches. **PRICE:**



ECHIUM ROSEUM

(Tower of Jewells). The picture above tells the story of this plant which is a biennial, easily raised from seed, doing well in poor sandy or rocky soil with perfect drainage. Color bright rose. In bloom during July and August. Height 6 ft. Not hardy in the North. T. pkt. 15c.

GLADIOLI QUEEN OF BREMEN—This is an excellent glad ideal for floral work. Its full beauty is revealed in a most telling way in basket work. Opens 6-8 blooms at a time on fine wiry stems. Offered on page 118.

NOVELTIES IN SEEDS

Many novelties are being introduced every year. Not all are of high value. Many of these are untried novelties. We are listing only such novelties that look very promising or that already proved to be of real value.



GENTIANA ACAULIS

Hardy robust growing perennial fine for pots and rockeries and a highly valuable cut flower. Flowers bell shaped, large and open of intense deep blue, remarkably beautiful. Contrary to the rule, this Gentiana is easily raised. However, the seed lays long before it germinates. It may germinate a few weeks after sowing and again the seed may lay for months before showing signs of life.

Read article under the heading "Seed Germinates Slowly on page 60.

Sow in a flat, pot up the seedlings when large enough to handle and plant in the open the following spring, spacing the plants 4x4 inches. Next spring place frames over the bed early in March and cover with sashes. Your plants will bloom then in April and May. Or you can pot up the plants and carry them into the greenhouse. Temperature 40 to 45 degrees. You will get elegant plants for Mother's Day, plants that will carry 6 to 10 blooms each. As your stock will get older and you will pot up plants two years old you will have 40 to 60 blooms on a plant and if employing three years old clumps way over 100 blooms. The start from seed means long waiting. But as soon as you will get two year old plants, you can increase your stock fast by dividing the plants in August. From then on Gentiana Acaulis will show you plenty of profit. If you'll say that Gentiana Acaulis is an old thing we say yes it is, in Europe. It will prove a success as it blooms early in the season before hot weather sets in and while growing conditions can be controlled. It ranks very high as a cut flower. The petals of the flowers are thick and leathery and the blooms "stand up" for many days after cutting.

Gentiana Acaulis loves sun, should be planted in a fairly heavy to quite heavy soil and it must have perfect drainage. Once established it multiplies faster than German Iris and no plant is easier to handle. Height 6 inches. T. pkt. 20c; 1/8 oz. 30c; 1/4 oz. 50c.

PLANTS: 50 cents each, 3 for \$1.40 prepaid.

EPACRIS HYBRIDA

Half hardy shrubby perennial, one of the most beautiful, hard wooded plants known. Of the highest value as a pot plant and for cutting. Recommended only to experienced growers that understand the culture of Ericaceae. Epacris requires same treatment as Erica. Worth growing because beautiful, out of the ordinary and a winter bloomer. The seed we offer is saved from choice hybrids of many colors, both single and double.

DIANTHUS NEGLECTUS

This is a real gem because of unusual beauty, also because it blooms in May and June when plants sell good. Potted and displayed when in bloom, will sell fast for at least 25 cents per plant, depression or no depression. It is a hardy perennial of compact growth, foliage gray green and neat, flowers born singly on upright stalks the size of a quarter piece, cup shaped, rosy pink with an extraordinary appeal. Once established, will thrive in almost any soil for years, withstanding any amount of heat and drought. Height 6 in. 25 seeds 20c; 50 seeds 35c; 100 seeds 65c; 500 seeds \$2.50.

DIANTHUS KNAPPI—Very dainty, rare, unique and the only Dianthus which produces yellow flowers which are born on slender stems in clusters during July and August. Extremely hardy, drought and heat resisting perennial, foot high. T. pkt. 40c.

DIANTHUS WINTERI—An excellent new hardy perennial Pink producing on stiff upright stems very large, single, fragrant flowers in many brilliant colors from May to frost. Does well under almost all conditions and will prove a fast selling plant. Height 10 in. T. pkt. 20c.

SWEET PEA SPRING FLOWERING

A new race of Sweet Peas producing a heavy crop of large Spencer type flowers on extremely long and stout stems 10 to 14 days ahead of the standard varieties when planted outdoors. Vines of vigorous growth, remarkably heat resisting. For winter bloom under glass start the seed in August and September. Many colors but no white. MIXED. T. pkt. 10c; oz. 35c; lb. \$4.00.

ZINNIA DAVID BURPEE—In formation of bloom the flowers resemble large double greenhouse chrysanthemums. They are of tremendous size up to 6 inches across and from 4 to 5 inches in depth with cutting stems averaging 18 in. in length. The flowers when cut "stand up" exceptionally well. The color range is very extensive and unusual. Height 3 ft. T. pkt. 15c; 1/8 oz. 30c; oz. \$2.00.

IRIS AUTUMN KING

German or Bearded Iris originated by H. P. Sass. Blooms during the May-June season and again from September until killed by frost. Flowers large, purple-blue. Very scarce. Two strong divisions for 35c, postpaid. Not prepaid: 10 strong divisions for \$1.00.

PHYTEUMA SCHEUCHZERI

New. Heat and drought resisting hardy perennial producing intense blue flowers in large heads in May and June. Fine for pots, rockeries and as a cut flower. Easily raised from seed. Requires porous well drained soil. Height 12 to 16 in. T. pkt. 25c.

PRIMULA GIANT MALACOIDES

New. Of vigorous growth, flowers extremely large, well formed, rounded produced on heavy wiry stems rising from rich green foliage. The colors are beautiful soft salmon rose, lavender, white and a delightful bicolor pink and white. A well grown finished plant will have from 30 to 50 spikes. MIXED. T. pkt. \$1.00.

GIANT MALACOIDES FAIRY JEWELS

New. This is a double form of this new Giant Malacoides. Florets 3/4 to 1 inch in diameter of lovely rich rose-pink slightly deeper in the center than the outer petals. The doubleness consists of a crested center of 2-3 extra rows of petals appearing at first as a tuft in the center of the flower later lying flat in double rows when flowers fully open. Comes over 90% double from seed. T. pkt. \$1.50.

LYTHRUM PINK BEAUTY

This new, very beautiful Lythrum originated in one of our gardens. Plants of compact upright growth, 5-6 ft. tall, throwing up a mass of long spikes of bloom from July to October. Color: fascinating, lustrous deep pink. High class for bouquets. Perfectly hardy. T. pkt. 20c.

NIEREMBERGIA PURPLE ROBE

Plants neat, compact, only 6 inches high with a spread of 10-12 inches, covered with bloom of deep violet-purple color that does not fade, throughout the season. Half hardy perennial blooming 3 months from date of sowing. T. pkt. 20c; 1/8 oz. 65c.



AQUILEGIA GLANDULOSA VERA

Exquisitely beautiful. Produces a wealth of large perfectly formed clear blue flowers with snow-white corollas in May and June. Height 20 in.

CAMPANULA COLLINA

Hardy perennial of neat compact growth, blooming in May and June. Flowers intense blue. Placed potted in full bloom on the market will certainly sell. Height 8 inches. T. pkt. 50c.

ERYNGIUM BOURGATII

Hardy perennial. Flowers steel blue, first rate for cutting and for dry bouquets from June to August. Foliage green, deeply cut, with whitish veins, very ornamental. Height 2 ft.

PENTSTEMON GRANDIFLORUS MIXED

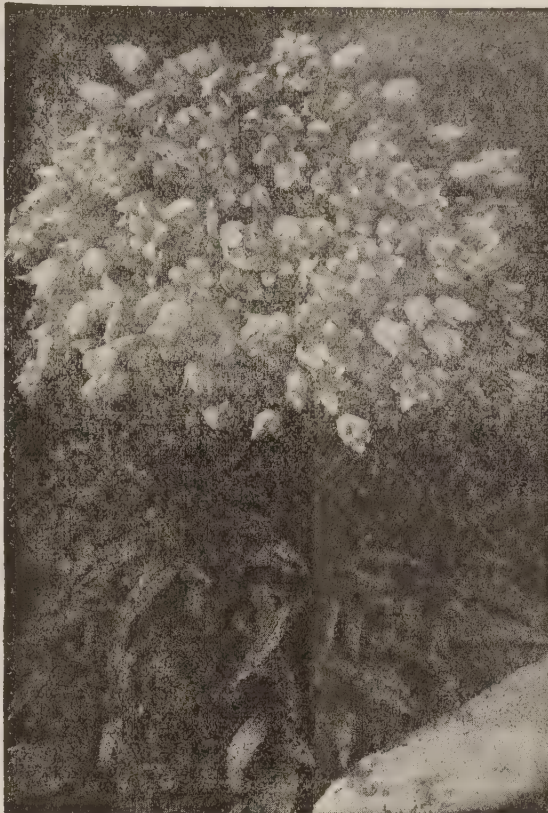
Besides the original blue flowered Pentstemon Grfl., we now have this beautiful Pentstemon in light and dark lavender, light wine-red and pure pink. If you will plant P. Grfl. in rich, well drained soil you will get spikes of exquisite beauty 4 to 5 feet tall, fully as valuable for cutting as gladiolus. T. pkt. 15c; 1/8 oz. 25c.

THALICTRUM DELAWAYI

An extra choice hardy perennial. Foliage fern-like of value as "greens" in flower arrangements, flowers pendulous bright purple, fine for cutting. In bloom during June and July. A really beautiful perennial, greatly admired. Height 3 feet.

Because of the war

It is impossible to secure choice stocks of some flower seeds that must be raised by experts to be of the required quality. These choice stocks we used to get mainly from Germany. The war cut us off from this source of supply. We have left the description of such items in the catalog but where we do not quote the price it means that at present we have no seed on hand and may not have for the duration of the war.



THERMOPSIS LANCEOLATA

New. Robust growing hardy perennial treated as an annual producing in April and May an abundance of highly attractive lupin-like flowers in long spikes fine for cutting. Easily raised from seed doing well in any kind of soil if well drained. Heat and drought resistant. The best time to sow is from April to July. The seed germinates 4-6 weeks after sowing. Height 2 ft. T. pkt. 15c.

SCABIOSA BLUE MOON

An entirely new type. Flowers extremely large and double, three inches across and three deep about the shape of an old-fashioned beehive. Of unimagined beauty. Color a luscious shade of deep lavender blue. An ideal cutting type, stems over 2 feet long. T. pkt. 15c; 1/8 oz. 20c; oz. \$1.00.

SCABIOSA ROSETTE

Very outstanding on account of its color which is a blend of pink, crimson and scarlet, very appealing. The flowers are perfectly double, large, borne on long stiff stems. The florist will find this new Scabiosa of high value as a cut flower. T. pkt. 10c; oz. 60c.

SCHIZANTHUS HYBRIDUS

DR. BADGER'S IMPROVED GIANT FLOWERED HYBRIDS. Large flowers, brilliant range of colors, from light pink through rose to deep purple, each flower with a large golden blotch. Contains no white flowers. Plants compact 12 to 14 in. tall. Very outstanding strain for the Florist. T. pkt. 15c; 1/8 oz. 30c; 1/4 oz. 55c; oz. \$4.00.

PENTSTEMON MIDDLETON GEM

Very much out of the ordinary. Flowers 2 1/2 inches across, gloxinia-like of rich rosy pink with pure white throat. Sown in February and planted out when danger of frost is past, will produce from August until frost, flowers of extraordinary beauty sure to create sensation in the flower market. Height 3 ft. T. pkt. 15c; 1/8 oz. 25c; 1/4 oz. 35c.

CLEMATIS MANDSHURICA

Of upright growth about 3 feet tall, producing in June-July quantities of beautiful very large snow white fragrant flowers, superb for cutting and flower work. Absolutely hardy. 25 seeds, 25c.

**WE FILL SEED ORDERS THE SAME
DAY AS RECEIVED**



STOCK GIANT WONDER

This splendid new stock represents a great improvement over all forcing stocks in size of flowers, doubleness, habit of growth and length of stems. It is a double purpose stock. When planted close the plant makes one long spike of mammoth florets closely packed around the stem. Given plenty of room the plants branch out producing double florets of still mammoth size on numerous branches two feet long. A bed of Giant Wonder stock produces extraordinary effect. Giant Wonder stock is extra early, the seed produces a high percentage of doubles. A prominent New York florist says: Giant Wonder Stock is the acme of perfection. You will agree once you'll see Giant Wonder in bloom. Height 28 to 32 inches.

WHITE, BRILLIANT RED, BLUE, LAVENDER, LIGHT PINK, DARK ROSE, YELLOW, VELVETY VIOLET, CHAMOIS. MIXED. Any color: T. pkt. 25c; $\frac{1}{2}$ oz. 35c; $\frac{1}{8}$ oz. 60c; $\frac{1}{4}$ oz. \$1.00.

PETUNIA GLOW

Dwarf compact bedding type. Plants very dwarf, very compact and bushy, covered throughout the season with flowers over two inches across of dazzling carmine red. T. pkt. 15c; $\frac{1}{8}$ oz. 45c; $\frac{1}{4}$ oz. 85c; oz. \$6.00.

ZINNIA SUPER CROWN OF GOLD—This is the finest of all large flowered Zinnias now in existence. Try it. Offered on page 114.

STOCKS EARLY COLONIAL

New. Strictly branching type of double flowering stocks. Plants do not form center spikes, require no pinching to make them branch. From the base of each plant 8 to 10 heavy, thirty inch branches spread out forming a plant 20 inches in diameter. Florets two inches across, spikes of flowers 15 inches long. Comes over 70% double. Extra early blooming two weeks earlier than the Perpetual Branching class. **PURPLE WHITE, SILVERY LAVENDER, DEEP ROSE. MIXED.** T. pkt. 25c; $\frac{1}{2}$ oz. 35c; $\frac{1}{8}$ oz. 60c; $\frac{1}{4}$ oz. \$1.00.

PETUNIA SUPREME

A selection from Giants of California. (Giants of California, Bodger's Supreme Florist strain). Blooms 5 to 7 inches across, shallow, open throats surrounded by satiny petals which are so heavily ruffled that in the young flowers they are easily mistaken for doubles. Colors are shades of pink, rose and salmon rose, the throats richly veined. Strikingly beautiful. Plants robust 18 to 24 inches tall when fully developed. The first flowers are produced when the plants are only 5-6 inches tall and for this reason it is an excellent strain for all that raise flowers for profit. T. pkt. 25c; $\frac{1}{64}$ oz. \$1.25.

PETUNIA VELVET BALL

New. Plants round, compact, ball shape, only 8 inches tall with 12 to 15 flowers in bloom at a time. Flowers $2\frac{1}{2}$ inches across, wide open and of a deep luscious shade of velvety blood red. T. pkt. 15c; $\frac{1}{2}$ oz. 25c; $\frac{1}{8}$ oz. 45c; $\frac{1}{4}$ oz. 85c; oz. \$6.00.



VISCARIA TOM THUMB

Extremely free flowering, annual of dwarf compact growth and great beauty. In bloom all summer. Easily raised. Fine for ribboning, bedding as a pot plant and a good cut-flower. **BLUE GEM**, bright, true blue. **ROSY GEM**, brilliant rose. Ht. 8 in. Price: Either variety: T. pkt. 15c; $\frac{1}{4}$ oz. 35c; oz. \$2.00.

IN THE BEST

do we trust. We sell seeds of best quality and what is more, we supply new and superior varieties in flowers and vegetables that cannot be had elsewhere. To have new and superior in seeds is our job. We are not sleeping on the job. All you have to do, is to grow these new things or at least try them, if you do not have enough faith in us. To try is your job. And if you will try what we offer, believe us, you'll not be fooled—you will make money.

DIVIDE YOUR PERENNIALS

Dividing keeps perennials in a healthy and vigorous condition. In dividing them, use your judgment. You can divide most perennials during the summer or early fall except those that bloom in the fall which are best divided in the early spring. Aggressive plants like Anemone, Physostegia and others should be divided annually. Phlox, Iris and plants with their rate of growth, divide every two or three years. Do not divide: Platycodon, Dictamnus, Gypsophyla and similar plants with carrot-like roots. Peonies should be divided in the fall once in 8-10 years. But in order to increase root stock, divide Peonies once in three years, not oftener else your roots will go blind.



STATICE DUMOSA

THE FINEST STATICE FOR DRYING

Of great value to the florist, in fact the most valuable of all Statice. In general appearance it resembles the well-known Incana Nana variety, which when dried is being imported from Germany and here used in immense quantities in wreaths and other floral work. Dumosa differs from Incana Nana in having larger individual florets, much brighter in color, clear silvery white when dry and lavender when fresh. The branched stalks are more than twice the size of Incana, the main stems twice as stout. For these reasons Dumosa is a highly valuable new variety. Height 20 in. Perfectly hardy without protection anywhere. T. pkt. 15c; oz. 80c; lb. \$8.00. Plant, \$1.00 per dozen, not prepaid.

Directions for Making a Lawn

On new lawns use 1 lb. of Seed for 100 square feet; 100 lbs. for one acre. To replenish lawns where grass is thin use half quantity. If you want a nice lawn and this in from 30 to 40 days after sowing, you cannot use less than 100 lbs. of seed to the acre.

In the formation of lawns, and proper care of lawns, many things are to be considered. The beauty of a lawn consists in the evenness of its surface, and the richness of its verdure. This can only be produced on well-drained, prepared, thoroughly pulverized soils. Another important consideration in making a lawn, is to have the soil of even depth throughout, so that the grass may be marked by a regularity of growth. After sowing, the ground should be lightly harrowed or raked, and heavily rolled, in order to press the seed into the soil. Sowing can be done from the middle of March to the middle of May, and in favorable seasons, even up to July. Seed may also be sown from the latter part of August to the end of September. As soon as the frost is out of the ground, the land should be heavily rolled, and cross-rolled, as the soil is loosened by winter frosts, and rolling is necessary to compress it again.

DANDELIONS—A good way to eradicate dandelions and other weeds in a lawn is to cut the grass regularly and never closer than two inches from the soil surface. Cutting induces sturdier growth of grass but the weeds perish when cut regularly and are prevented to seed themselves.

Leave cut grass lay, it will quickly shrivel, work down to the soil surface and form a mulch. Your grass will withstand dry weather far better than lawn that is sprinkled. Your lawn will continue green in spite of drought for an entire summer. Watering: Apply water when the color of your grass begins to be pale instead of a deep green, then soak the ground a foot deep by laying the hose on the ground and letting the water flow in a gentle stream for an hour or two on one section after another. Do not sprinkle your lawn as sprinkling is of doubtful help and in some cases actually does harm. If you will water thoroughly your grass will have plenty of moisture to fall back upon for three weeks in hottest of weather and longer if the temperature is not too excessive. And it is easier and less work too, than when you are sprinkling every day.

Lawn grasses should be sown thickly, from 150 to 50 square feet to the pound, depending upon condition of the soil, time of year, etc. We like the plan of working in units of 100 square feet (10 by 10 feet squares), and seeding each unit with the quantity of seed decided upon. An easy way to do this is to take two heavy cords, each ten feet long and with a loop in each end. By starting at one corner and staking out regular spaces using the same amount of seed for each square of 100 feet your lawn will be very evenly seeded.

Use no fresh manure for fertilizer because it contains weed seeds. Bone meal three pounds per 100 square feet is the proper thing to use.

If your lawn becomes mottled with brown patches of dying grass or showing damage of any nature write to Dept. of Agriculture, Washington, D. C. You will get expert advice absolutely free of cost.

Lawn Grass Seed

In composing lawn grass mixtures, we use the highest grade of seed thoroughly recleaned, containing the largest proportion and the greatest weight of actual seed, a grade that is closely 100% free of hulls, the best grade obtainable.

The small proportion of Rye grass that is included in some of the mixtures insures a quick effect (within a month from date of sowing). Rye grass is a protective grass and dies out completely in two years, its place is taken by Blue Grass, New Zealand Fescue and finally by Bent Grasses, all fine leaved varieties. You will have from our seed a wonderful lawn that you will be proud of.

SPECIAL BENT LAWN GRASS SEED

Composed of the best Bent varieties with a proper proportion of Red Top and Rye Grass. This special Bent Grass seed will produce a dense turf of the finest texture rivaling in luxuriant feel an expensive oriental rug. No other Lawn Grass can compare in results with a lawn produced from the Bent Grasses. Bent Grasses are the dwarfest in cultivation, their creeping character causes them to mat together and they produce a dense mat of fine, silky leaves, deep, rich green in color. Bent turf can be mown closely and will stand up well under the heaviest wear. Ideal for forming a terrace sod as it will withstand drought and sun. If the slope is gentle add one inch of top soil, sow the seed at the rate of one pound to each 100 square feet, rake the seed in and firm the soil with a roller or back of a spade. If the slope is quite steep, proceed as above but sow along with the Bent Lawn Grass Seed one-half pound of Italian Rye Grass to each 100 square feet. Italian Rye Grass is a quick growing grass and will hold the soil together and give a chance for Bent Grasses to establish themselves. Mow the Rye Grass as soon as the growth is of sufficient height and keep it cut. We compose this Special Bent Lawn Grass Mixture out of separate varieties, using only the heaviest and highest germinating seed and if you will follow our directions you will have a lawn that will be the talk of the neighborhood. Price: Lb. 90c; 2 lbs. \$1.75; 5 lbs. \$4.25, prepaid. NOT prepaid: 10 lbs. \$8.00; 100 lbs. \$75.00

ITALIAN RYE GRASS

An annual, fine leaved deep green grass, unexcelled as an admixture in lawn grass. Will make a fine turf in 30 days after sowing. Its value lies in the fact that by its extremely quick growth it will bind soil together preventing washing out in case of heavy downpours and that it will protect other grasses of fine texture like Bent Grass for instance. Its main usefulness in the North is to serve as a "nurse crop", in the South it makes an excellent winter turf when Bermuda Grass is dormant. High grade imported seed. Lb. 30c; 2 lbs. 55c prepaid. Unprepaid: 10 lbs. \$1.80; 100 lbs. \$16.00

KENTUCKY BLUE GRASS—Extra fancy seed. 1 lb. 45c; 10 lbs. \$3.20.

WHITE CLOVER—Extra recleaned seed. 1 lb. 90c, prepaid.

GRASS FOR GOLF COURSES Genuine Washington Bent Grass is the best. The sturdiest grower, staying green even in prolonged hot and dry weather. Resistant to zonate-eye spot, a disease manifesting itself in the peculiar targeted appearance on the leaves, sometimes killing the leaves entirely, turning the turf to a brown color. For best results in establishing a turf start Bent Grass from seed. Use 15 lbs. per acre.

WASHINGTON BENT GRASS Lb. prepaid, \$1.10. Unprepaid, 5 to 10 lbs. 95c per lb. In lots of 10 lbs. or over 90c per lb.

GERMAN BENT GRASS 1 lb. \$1.30, prepaid. Unprepaid, 5 lbs. \$5.50; 10 lbs. \$10.

If your lawn becomes mottled with brown patches of dying grass or showing damage of any nature write to Dept. of Agriculture, Washington, D. C. You will get expert advice absolutely free of cost.

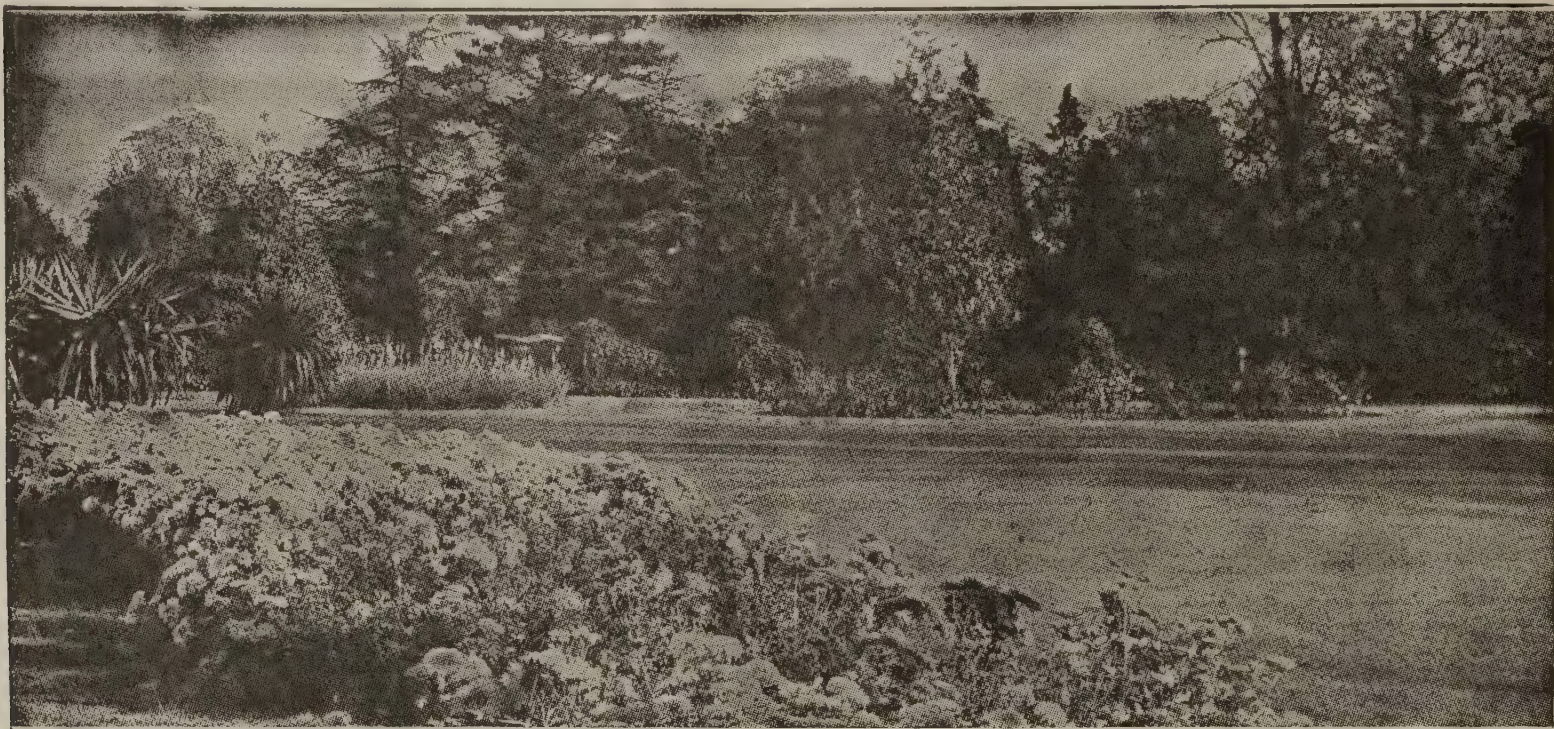
RHUBARB RUBY

Ruby produces about twice the amount of stalks that common rhubarb does and the stalks are 20 to 24 inches long, one inch through of deep crimson along the entire length of the stalks. The flesh of Ruby is bright crimson. Ruby will outsell any other rhubarb on the market. While not exactly a new variety it is still very scarce and all we can supply is not over 5 roots to a customer. Growers will do well to get a start on Ruby. Price: Heavy roots 5 for \$1.00, lighter roots 5 for 75c, not prepaid.

MR. FLORIST: You can decorate your store in a grand way and at the same time in a very inexpensive way, using for this purpose Celosia Plumosa Thompsoni Magnifica. This Celosia can be planted in any nook or corner and will produce an unbelievable amount of high class floral material. The cut flowers and branches last in good condition for months. This and most other Celosia have about the same long keeping qualities as strawflowers.

Ours is the most critical trade—gardeners and florists. We cater to the wise and experienced. We give value. Among our customers are the foremost florists and market gardeners.

We sell quarter and half ounces at oz. rates; quarter and half pounds at pound rates.



DE GIORGI' SPECIAL LAWN

This mixture contains several of the finest American and European grasses adapted for Lawn making and cannot be excelled, being by far superior to mixtures usually sold. Produces a perfect lawn in a few weeks after sowing, that stays green from early spring till winter, does NOT turn yellow even in the hottest and driest part of summer and does well in moderate shade as well as in full sunlight. This because we use the best grade of seed in its composition and the right kind of fine leaved grasses in proper proportions. Price, by mail, postpaid: 1 lb. 50c; 3 lbs. \$1.35. Not prepaid: 10 lbs. \$3.75; 100 lbs. \$35.00.

PUTTING GREENS

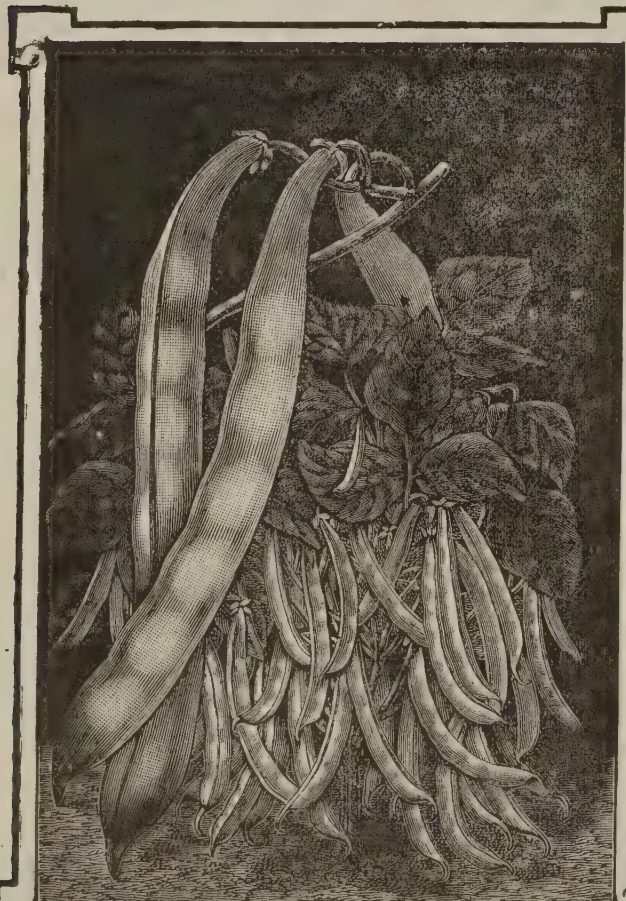
The hardest and finest growing grasses are contained in this mixture. It produces a beautiful and lasting green turf, calculated to withstand hard wear and tear. By mail, postpaid: 1 lb. 60c. Not prepaid: 10 lbs. \$5.00; 100 lbs. \$48.00.

OUR SPECIAL LAWN GRASS SEED is used by landscape gardeners in quantities, because it produces permanent dark green turf in a short time, does not winter-kill and once established no additional seedings are necessary.

DEEP SHADE LAWN This is a mixture of the most expensive fancy grasses only, such as Wood Meadow Grass, Slender Fescue, etc., and will give perfect satisfaction anywhere in dense shade. By mail postpaid: 1 lb. 60c. Not prepaid: 10 lbs. \$5.00.

YARROW Makes a beautiful deep green closely woven turf and we recommend it highly for seeding such spots that are bare from constant tramping and where grass will not grow. Yarrow will make close, neat, dark green sod that will stand the wear and will eliminate the bare spots in your lawn, golf links, etc. It will last for years and do well even in dry and quite poor soil where hardly anything else will grow. An ounce of seed will sow 50 square feet. Four pounds of seed will sow an acre.

THE VALUE OF A LAWN GRASS MIXTURE depends on what the mixture contains. Most people cannot tell one grass seed from another and many buy if the price is low. Later they are sorry. Buying our grass seed, you will get a mixture composed of proper grasses in proper proportion and seed of first quality. You can throw into a mixture almost anything—dust, weed seeds, timothy seed, etc. Our seed is not that kind. We sell ONLY the best, seed that will give RESULTS so that the buyer is prompted to say to his friends: If you want good seed you'll get it from DeGiorgi.



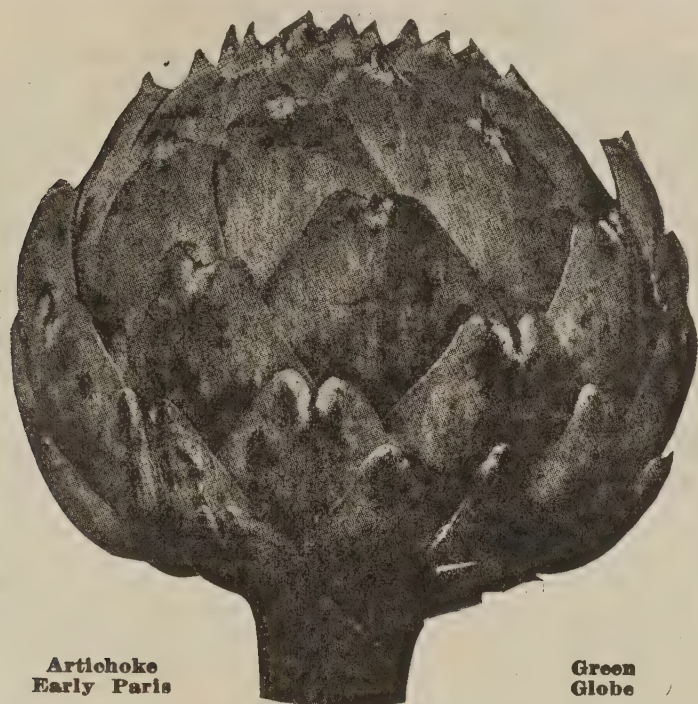
ADMIRAL WAX BEAN (49 days)

Admiral Bean is the most valuable and absolutely the best early wax bean of quality.

Extra early, heavily productive, a sure cropper even under unfavorable conditions. Admiral will yield a heavy crop of meaty, stringless, oval-shaped, straight pods, 5 to 6 inches long, of lustrous, attractive, rich golden yellow color when planted early or late and even during hot any dry weather when most other beans fail. Admiral will even stand a light frost without injury. An unbeatable variety and market gardener's money maker. Pkt. 10c; 1 lb. 40c; 10 lbs. \$2.60; 100 lbs. \$24.00.

BLACK VALENTINE STRINGLESS (49 days)

Of all green podded beans this is the best seller in spite of the fact that a market basket of Black Valentine weighs fully a pound less than a basket of other beans. This because the pods are of very fine appearance and of outstanding quality. The pods retain color and texture in shipping long distances. The plants of S. B. V. are of heavy, erect growth and heavily productive. Does well on rich ground. If your ground is light try on a small scale first. Not prepaid: 10 lbs. \$2.60; 100 lbs. \$24.00.



Artichoke
Early Paris

Green
Globe

A most delicious vegetable usually boiled and eaten with a dressing of fresh butter. See page 119 for cultural directions.

EARLY PURPLE GLOBE—*Carlofo violetto di Chioggia*.) Purple tinged, large, globe shaped, tender, very productive and earliest variety.

Asparagus

CULTURE—1 oz of seed will produce 1000 plants, 1¼ lbs. of seed enough plants to set an acre. For a crop of plants use 10 lbs. of seed per acre.

Sow early in the spring. Have the rows 2 feet apart, cover the seed with half an inch of soil. Thin to not less than 2 inches apart. To get strong roots fit to be planted in permanent beds the following spring. In preparing your permanent bed prepare the ground in the fall by giving it extra heavy coating of manure, then plow the ground very deep which will kill all weed seeds and destroy cutworms and it will have a tendency to make the ground warmer; in a word your ground will be in excellent condition to receive the plants in the spring. Lay out your beds 4 feet between the rows and plant 2 feet apart in the rows, in furrows 8-10 inches deep, spread the roots to radiate in all directions and cover with 3-4 inches of dirt. In later cultivation gradually fill up the furrows as the plants grow till the whole field is level. If you will not cut at all until your bed is 3-4 years old, your asparagus will run extra heavy so that a bunch of 5-7 stalks 8 inches long will weigh a pound, fetching top price. Asparagus beetle if unchecked will destroy your asparagus. Destroy the beetle by dusting with calcium arsenate through the season while the dew is on. Never apply calcium at the time of cutting for market as it is a rank poison. Asparagus seed germinates rather slowly; to insure better germination soak in hot water before sowing. Governmental bulletin No. 289, Asparagus, may be had on request to the Department of Agriculture, Washington, D. C.

SALT ON ASPARAGUS is of no benefit. It does not improve the flavor of the stalks, does not increase the yield, neither will it kill the weeds.

ASPARAGUS MARY WASHINGTON

The best of the Washington varieties and the best of the rest. Superior because it holds a tight bud the longest, and the stalks are heavy and big. It is rust resisting, somewhat earlier than other varieties and while it does not yield as many stalks, the stalks are larger and the yield in pounds per acre is considerably greater. The seed we offer is first generation removed from strain originated by Dr. Norton. Pkt. 5c; oz. 10c; lb. \$1.00; 5 lbs. or over at 85c per lb. prepaid.

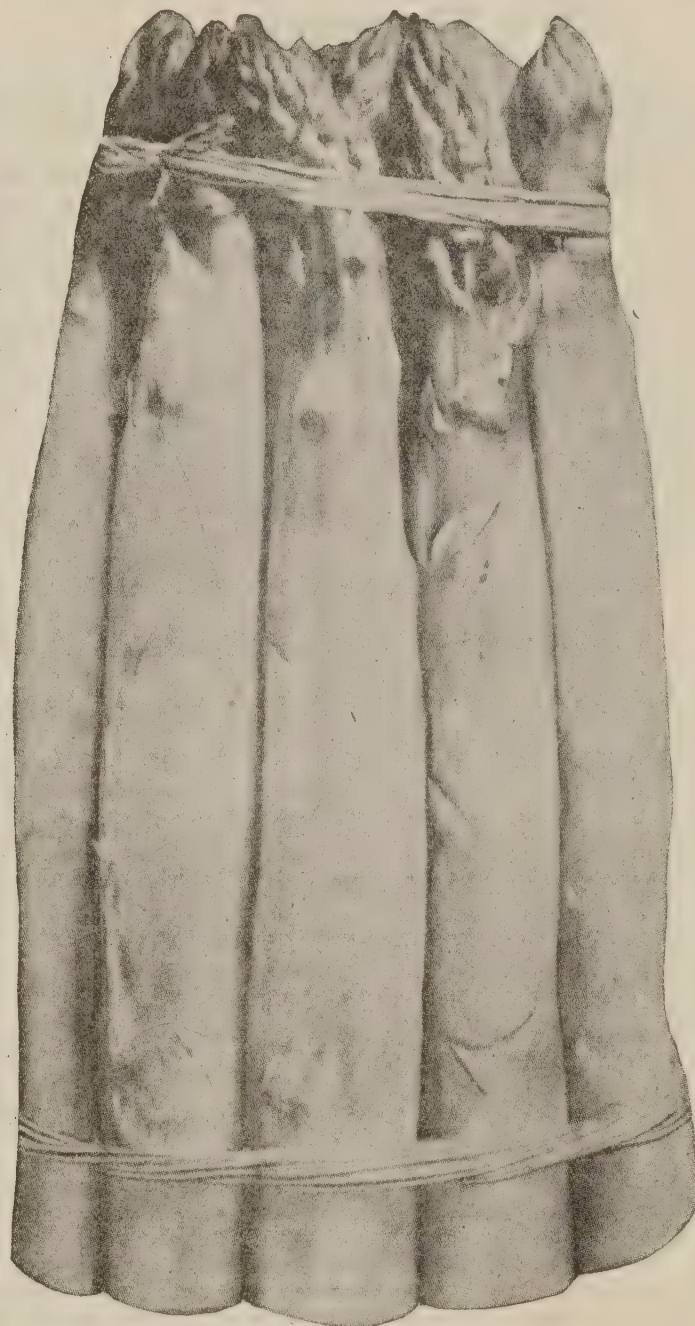
HEAVY 2 year old roots: 25 for \$1.00 prepaid. Not prepaid: 100 roots \$2.00; 1,000 roots \$18.00. Shipping weight 100 2 year old roots, 5 lbs.

Lighter one year old roots: 100 for \$1.50; 1,000 for \$14.00.

ASPARAGUS ROOTS

Our asparagus roots are of superior quality, produced in the rich Iowa soil, are extra heavy and full of vitality. Grown by us on our own land and in a different way than is the rule. For a crop of roots we sow thinly, every seed 3 to 4 inches apart. This gives the roots a chance to develop into real size, they grow fast, and a plantation from roots produced by our method yields a maximum of No. 1 grade asparagus.

ASPARAGUS PARADISE—Produces more asparagus per acre and a year earlier when started from seed than is the case with other varieties of asparagus. So says the introducer of this new variety. Pkt. 10c; oz. 20c; lb. \$2.00, prepaid.



Asparagus Mary Washington

BEAN TENDERGREEN (54 days)

Possesses high eating qualities and is marvelously productive. The plants are strong and vigorous, well branched, holding the heavy load of pods well up from the ground. The pods are seven inches long, absolutely straight, round, extremely meaty and tender, of beautiful attractive light green color. The pods are stringless even when fully developed. Tendergreen is of the greatest value both for market gardeners as well as for canning. Those that tried this bean praise it highly. Quite early, although not in the earliest class. Pkt. 10c; lb. 40c, postpaid. Not prepaid: 10 lbs. \$2.60; 100 lbs. \$24.00.

BEAN GIANT ENGLISH (70 days)

**IMMENSELY PRODUCTIVE—HARDY LIKE PEAS
PODS AND BEANS OF GIGANTIC SIZE**

Here is an opportunity for progressive gardeners. A bean closely resembling largest podded limas, ready weeks ahead of limas. A standard bean in England, different from other beans in being as hardy as peas or lettuce and like peas should be planted as soon as the ground is in workable condition in the spring. The pods grow direct from the stalk, the stalk grows about 3 feet tall, the pods are gigantic in size, so are the beans, and there is no bean more delicious. You will sell these beans if you will have them. They are nothing new to most foreign people who buy English Beans eagerly. Plant in rows 18 inches apart, six inches apart in the rows, one bean to a hill. Pkt. 10c; 1 lb. 40c, prepaid. F. O. B., 10 lbs. \$2.40; 25 lbs. or over at 22c per lb.

We sell half pounds at pound rates, 5 lbs. or over at 10 lb. rate, 25 lbs. or over at 100 lb. rate.

Beans

OUR BEAN SEED is of superior quality carefully grown and inspected in the field 3 to 4 times. At no time is the crop harvested if it shows even a trace of anthracnose halo or bacterial blight.

HOW MANY BEANS, TO PLANT AN ACRE?

Planting in rows 3 ft. apart, dropping 3 beans in hills foot apart in the row, 40 lbs. of bush beans will easily plant an acre. Pole Beans 25 lbs. per acre. Bush Lima and Pole Limas also English beans are planted at the rate of 45 to 60 lbs. per acre. Less if you plant small seeded Limas, more if the variety planted is large seeded. One pound of beans will plant a row 50 feet long.

Beans do well in any soil, light soil is best for them. Have the rows three feet apart to allow horse cultivation, or 16 inches apart for hand cultivation. Plant the seeds 12 inches apart in the row and cover up with two inches of soil. Never plant Beans until the apple trees are in bloom. Give frequent cultivation. Some people plant extraordinarily early, and in most cases they lose their first planting which, considering the price of seed and labor, is rather expensive. Do not cultivate your Beans when they are wet from dew or rain; if you will, the plants will get blighted and pods rusted.

CULTURE FOR LIMA BEANS. These are VERY sensitive to cold, therefore must be planted later than is usual with regular beans—when the weather is thoroughly settled and warm and not before, or the seed will rot in the ground. Avoid ground fertilized heavily with fresh manure, because the plants on such ground drop their blossoms, resulting in few or no pods. Space bush limas 1½ ft. apart in the row, pole limas 4 ft. each way, placing one seed of bush limas to a hill and 4 to 6 beans in a circle about the pole of pole limas; always planting the seed with the eye DOWN. Cover the seeds about 2 inches deep.

In our locality Dwarf Beans can be planted up to August 1st. Pole Beans up to July 15th, Limas up to June 1st, English Beans must be planted as soon as the ground is open in the spring.

POLE BEANS. Perhaps you think it is too much trouble fussing with the poles. A friend of ours had the same idea, but he was prevailed upon to try them several seasons ago. Now he always plants pole beans, always KENTUCKY WONDER. And about twenty-four poles, three plants to a pole, furnish all the beans for a family of seven—and they're pretty big "bean eaters" at that. If your garden is of fair size, try some this season—get GOLDEN CLUSTER if you want the wax—and you'll have some every season afterward. They are enormous producers; you have no idea until you try them how big a crop they produce.

Set the poles four feet apart each way, tie each set of three together at the top, wigwam fashion and you'll be surprised at the results.

ASPARAGUS POLE BEAN. This is a distinct specie of Beans. The pods are good eating and they really grow 3 feet or even longer. They will do well everywhere and are worth planting.

SCARLET RUNNER. This Bean is in a class by itself. It is generally planted for its bright red flowers rather than as a cropper.

ENGLISH BEANS Unlike other beans they are perfectly hardy, must be planted as soon as the ground is open in the spring, which in our section of the country is March 1st. In the South and on the Pacific coast, plant late in September or real early in October. English Beans can go through many frosts unharmed, they are hardier than Peas. Heavily productive in rich heavily manured soil. Fresh manure does not affect these beans. Pods 5 inches long, an inch wide, dark green and 4 to 5 beans in each pod. Only the beans are edible either in the green stage or dry. Dry beans have thick skin, boil them for a few minutes. This makes the skin to inflate and the beans are easily skinned. Will cook in about one hour. The beans contain a large percentage of organic sulphur for that reason are very healthy food. English Bean is the coming vegetable, the demand growing speedily in all large markets.

MASTERPIECE BEAN (53 days)

An extra early bush bean of vigorous upright growth, heavily productive, exceedingly valuable for pot culture as a forcing variety. Pods long, tender when young, round, meaty and straight. Pkt. 10c; lb. 40c; 10 lbs. \$2.10; 100 lbs. \$19.00.

BUSH BEAN COMMODORE (63 days)

Really KENTUCKY WONDER in bush form. Plants large of upright growth producing an extra heavy crop of very fleshy dark green stringless pods 8 inches long till frost if kept picked. Different from other bush beans in flavor. The pods cook up in less than half the time required for other beans and they are the tastiest and tenderest of ALL string beans. Pkt. 10c; lb. 45c, prepaid.

TASMANIA BEAN

Tasmania Bean is a variety of edible gourd, producing an immense amount of fruit, delicate in taste and nourishing, whether boiled, fried, stewed or baked. To many people, the fruit sliced, breaded and fried in butter tastes like a most tender veal steak. The fruit grows on vines similar to those of squash but much more vigorous in growth. If given support the vines will climb and the fruit will hang down and be of fine, straight, symmetrical form. Pick when young, when the fruits weigh about 8 pounds or less. Cultivate same as for watermelons. Place 2 or 3 seeds in each hill, not more. Pkt. 10c; oz. 30c; ¼ lb. 50c; lb. \$2.00.

GREEN BUSH BEANS

Any variety, 10c per pkt.; ½ lb. 20c; lb. 40c, postpaid.

Not prepaid:	10 lbs.	100 lbs.
Black Valentine Stringless (49 days)....	\$2.60	\$24.00
Bountiful (49 days)	2.60	24.00
Full Measure (54 days).....	2.60	24.00
Giant Stringless Green Pod (54 days)....	2.60	24.00
Giant English (70 days)	2.60	24.00
Landreth's Stringless (52 days).....	2.60	24.00
Masterpiece (53 days)	2.60	24.00
Navy (90 days)	2.60	24.00
Pride of Iowa (53 days).....	2.60	24.00
Stringless Green Pod (52 days).....	2.60	24.00
Tendergreen (54 days)	2.60	24.00

BLACK VALENTINE STRINGLESS (49 days)

Very desirable market and shipping type of bean. Plants large, heavy, erect, extremely hardy resisting light frosts and heavily productive. Pods almost 7 inches long, nearly straight, meaty, oval shaped dark green and entirely stringless. Quality of the pods is first class and the pods stay fresh and firm, retaining their bright green color long after picking. Will make a crop under the most trying conditions, whether planted early, late or in middle of the growing season.

Our strain of Stringless Black Valentine is a result of years of pure-line breeding and cannot be compared with ordinary stocks. Every year our supply of this bean is sold long before the end of planting season. Place your order early, especially if in the market for sizeable quantities.

WAX BUSH BEANS

Not prepaid:	10 lbs.	100 lbs.
Admiral Wax (49 days)	\$2.60	\$24.00
Brittle Wax (58 days)	2.60	24.00
Champion Wax (52 days)	2.60	24.00
German Black Wax (52 days)	2.60	24.00
Golden Wax Improved (51 days).....	2.60	24.00
Pencil Pod Wax (55 days).....	2.60	24.00
Prolific Blac Wax (55 days).....	2.60	24.00
Round Pod Kidney Wax (58 days).....	2.60	24.00
Webber or Cracker Jack Wax (50 days)...	2.60	24.00
Unrivald (52 days)	2.60	24.00

BUSH BEAN DELICATA (58 days) Pods 6 to 7 inches long of light transparent yellow, almost straight, semi-round, fully stringless and fiberless of delicate flavor. Plants sturdy, heavily productive. Delicate is the tastiest of all beans and a sort to grow for trade that insists on highest quality. 10 lbs. \$2.60; 100 lbs. \$24.00.

BUSH LIMA BEANS—BUTTER BEANS

Any variety, 10c per pkt.; ½ lb. 20c; lb. 40c, prepaid.

Not prepaid:	10 lbs.	100 lbs.
Fordhook Bush Lima (75 days).....	\$2.60	\$24.00
Henderson's Improved (65 days).....	2.60	24.00
Prolific Bush Lima (66 days).....	2.60	24.00
Burpee's Improved Lima (75 days).....	2.60	24.00

POLE LIMA BEAN JUMBO (90 days)

Extraordinarily productive, the vines bearing pods from the bottom to the top of vine, the pods often over 8 inches long and about 2 inches wide, filled with beans of extra large size. The pods are produced in clusters of from 4 to 8 until the vines are killed by frost. Pkt. 10c; lb. 40c, postpaid. Not prepaid: 5 lbs. \$1.40; 10 lbs. \$2.60. **POLE LIMA BEAN CHALLENGER**—A potato lima similar in pod and seed to Fordhook Bush Lima. Plant vigorous, hardy good climber heavily productive. Pods straight, smooth produced in clusters of 4 to 8 well filled with 4-5 large plump beans. Pkt. 10c; lb. 45c, postpaid. Not prepaid: 10 lbs. \$2.80; 100 lbs. \$26.00.

POLE BEANS

Any variety, 10c per pkt.; ½ lb. 20c; lb. 40c, prepaid.

Not prepaid:	10 lbs.	100 lbs.
Early Golden Cluster Wax (74 days).....	\$3.20	\$30.00
Kentucky Wonder Green Pod (65 days)...	2.60	24.00

OREGON GIANT POLE BEAN (55 days)

Pods very long and broad, very tender, a great improvement on the old Kentucky Wonder. Brings a premium on any market. Crop failed.



Pride of Iowa

PRIDE OF IOWA BEAN (53 days)

PRIDE OF IOWA is a wonderful variety. The pods are of beautiful appearance, nearly round, deeply creasebacked dark green, extremely brittle, absolutely stringless in all stages of growth, totally without fibre, very meaty and possess a delicate flavor. They hang in large clusters on the vines and it is easier to pick 50 baskets of them than it is to pick 25 baskets of any other green sort.

PRIDE OF IOWA produces on an average of 75 to 100 market baskets more per acre (baskets as used in our market of one-third bushel capacity) than any other green podded Bean. We tried every variety listed by us as well as many that we do not list, and know what the facts are.

PRIDE OF IOWA has very bushy vines that grow about 18 inches high, without runners and with thick stalks that keep the plant erect and unaffected by high winds. The bushes are very broad and for best results must be planted in rows 3 feet apart and a foot apart in the rows. Pkt. 10c; lb. 40c, prepaid. Not prepaid: 10 lbs. \$2.60; 100 lbs. \$24.00.

BEAN GREEN PERFECTION (53 days)

Pods 6 inches long, almost straight, round, very meaty, medium green, strictly stringless and fiberless of excellent quality. Plants large, erect, very productive. Seed white. 10 lbs. \$2.60; 100 lbs. \$24.00.

CROSBY'S EGYPTIAN BEET (60 days)

Selected stock. The roots of our strain are almost globe shaped, dark red, in and out, of fine shape either young or when left standing till late in the fall. The finest strain to be had. Pkt. 10c; oz. 20c; lb. \$2.00, prepaid.

DETROIT DARK RED BEET (60 days)

Extra select stock greatly improved in looks as well as in quality, as you will see if you will try. Fine globe shape, smooth, very dark red, tender roots with small tap roots and just enough foliage to make it easy to tie in bunches. Extra good. Pkt. 10c; oz. 20c; lb. \$2.00, prepaid.

LONG SMOOTH DARK RED BEET (75 days)

A long beet is popular in some markets and if you wish to get something extra good in a long beet we have it. The roots of our strain are shaped like a carrot, averaging 9 inches in length and 3 inches through at shoulder, and 1½ inches through near the end of the root. Symmetrical, smooth, uniformly deepest blood red in and out, fine flavored, and sweet. Foliage dark bronze and not too heavy. Pkt. 10c; oz. 20c; lb. \$2.00.



Beet Early Wonder

EARLY WONDER BEET (55 days)

DEEP RED IN COLOR, TENDER AND SWEET

EARLY WONDER is of ideal shape, perfectly smooth, free from fibrous roots, and with only a small tap root. The flesh is tender and sweet and stays so in all stages of growth. The color is intensely solid deep crimson red. The tops are considerably smaller than is the case with other beets, yet the amount of foliage is sufficient and makes it an ideal bunching variety. It has just the right amount of leaves, an item of importance, as it does away with lots of work connected with trimming the leaves.

EARLY WONDER is the result of years of re-selecting and improving, and absolutely the first in earliness. It never gets out of shape no matter how long left standing in the field after reaching maturity. It does extraordinarily well even on thin soil and is so positively unusual that we unhesitatingly say to you plant heavily for early young beets. Pkt. 10c; oz. 20c; lb. \$2.00, prepaid.

BEET WINTER KEEPER (80 days)

Turnip shaped beet of highest quality, valuable because stored in a vegetable cellar, will keep for months in prime condition and can be marketed in an "orderly" way, that is, brought to market in such quantities that the market will not become flooded. We advise a trial. Pkt. 10c; oz. 20c.

EXTRA EARLY EGYPTIAN BEET (55 days)

Extra early, producing flat, smooth, turnip shaped roots, about 2 inches in diameter. Flesh deep red, and very sweet and tender. An old standard sort of the most popular variety among market gardeners for forcing. Pkt. 10c; oz. 20c; 1 lb. \$2.00, prepaid.

Brussels Sprouts

The plant is erect, two feet

or less in height and in addition to the rather broad, heavy leaves the stem produces miniature heads of cabbage, probably an inch or more in diameter. Fashionable hotels are generally good customers for this vegetable. Culture same as for cabbage, except that the leaves should be pulled down in the fall to give the small heads more room to grow.

BRUSSELS SPROUTS—AMAGER MARKET

A fine strain, quite early, with sprouts compactly set, yielding as high as five thousand quarts of beautiful sprouts per acre. Pkt. 10c; oz. 50c; (70 days).

IMPROVED EXTRA DWARF

Dwarf habit, the stems are thickly set with Sprouts which grow about one inch in diameter. Pkt. 10c, prepaid. (70 days).

Broccoli—See page 23.

Table Beets

CULTURE—1 oz. will sow 50 feet of row, 4 lbs., to an acre. Plant beets when frost is out of the ground and the soil in workable condition. Have the rows 16 inches apart, plant moderately thick in the row and later thin out to 4 inches in the row. The thinnings furnish excellent greens. Give frequent cultivation.

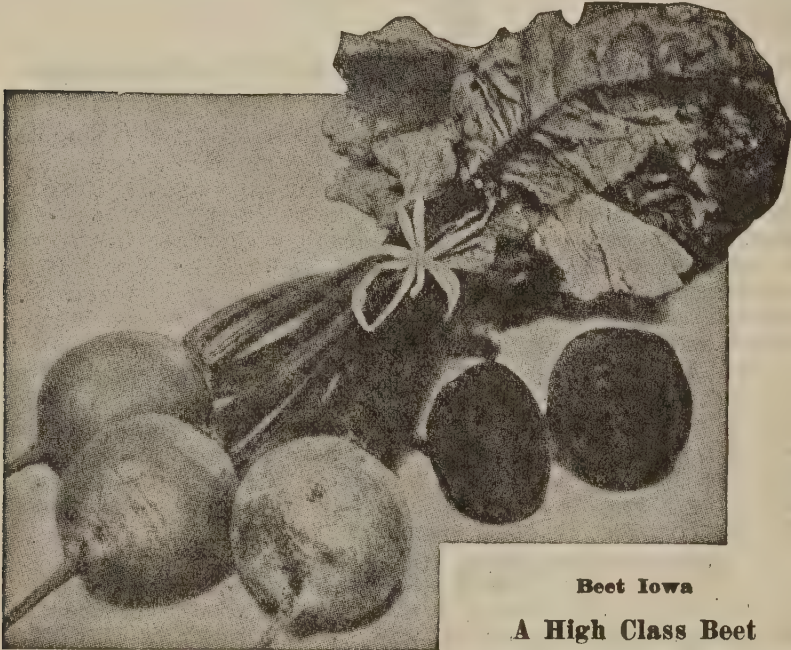
In our section beets can be sown up to August 1st.

EARLY BEETS—About 15th of February broadcast $\frac{1}{4}$ lb. of seed per sash in a hot bed that is not too warm, transplant on a cloudy day when your plants are about 6 in. tall using only good plants throwing away all weak ones. You will get a crop of beets days ahead of field sown beets.

EARLY WONDER BEET—You will find a marked difference in quality and EARLINESS between our and most other strains. Our stock is the result of years of breeding, producing quickly a fine crop of smooth roots, round when young, semi-globular when more fully grown, deep red with small tap root and small neck, with tops of distinctive green color bunching very attractively for market.

WHICH BEET IS THE BEST?

For the earliest crop and for forcing try either Early Wonder or Iowa. For canning and for a maximum crop, Iowa and Detroit are hard to beat. The Egyptian beets are of highest quality and very dark in color but losing in favor possibly because more or less flattish. For a market with large foreign population, try Select Long Smooth Blood.



Beet Iowa

A High Class Beet

NEW BEET IOWA (56 days)

VERY EARLY—HEAVILY PRODUCTIVE

Superior in shape and color, with the extra advantage that its foliage is light, yet ample, to make it easy to tie.

Globe-shaped, smooth and much darker in color than most globe-shaped beets, both in and out. Medium in size, never cracks open and never grows to immense proportions like other beets. The flesh is rich, deep, brilliant, scarlet-red without light zones, sweet and tender. Every plant of Iowa makes a shapely and salable root, even if the plantation is left unthinned and the plants allowed to crowd one another. Iowa is an all purpose beet, but especially valuable for growing on a large scale for canneries or the wholesale trade. **BEET IOWA** is uniform in inside color being a VERY dark crimson without any purple or brown shade, not even when it is boiled. Pkt. 5c; oz. 15c; lb. \$2.00.

Swiss Chard

Also called silver beet or spinach beet. Is grown exclusively for its leaves. The root never develops to a large size and is of no value. The leaves are carried on long, broad, thick stalks of which the leafy portion is used as spinach and the stalks or midribs like asparagus. It produces continually throughout the summer till frost and furnishes an abundance of excellent "greens" during the hot summer months when spinach cannot be grown. Culture same as for beets. 1 oz. for 100 ft. row, 4 lbs. per acre.

Lucullus and Green Giant Swiss Chards are both savoyed and curly. However in some markets the curly Chards are not wanted and if the favor is shown the smooth leaved variety, our Silver Giant Chard, is the sort to grow.

An Ohio customer writes: Iowa beet beats any variety I ever planted.



SWISS CHARD GREEN GIANT (55 days)

Leaves much darker green than those of any other variety, crumpled and savoyed like spinach, about two feet long, about a foot wide with an immense snow-white fleshy midrib. Of excellent quality. Yields continuously from early summer until frost. Break the outside leaves carefully while still young. New tender leaves will rapidly be put forth and you can keep on harvesting all through the season. Pkt. 5c; oz. 15c; lb. \$2.00.



SWISS CHARD LUCULLUS (50 days)

Leaves heavily crumpled, very large, stalks white, thick and tender, well flavored. Pkt. 5c; oz. 15c; lb. \$2.00.

SWISS CHARD SILVER GIANT (50 days)

Leaves smooth, dark green, the stems silvery-white, fleshy, broad, tender and ne flavored. Pkt. 5c; oz. 15c; lb. \$2.00.

RHUBARB SWISS CHARD—Stalks of clear bright crimson, the color extending through the veins into the giant sized heavily crumpled tender leaves. Pkt. 15c; oz. 50c.

Cabbage

CULTURE: 1 oz. of seed will produce 3,000 plants, 8 oz. per acre. **EARLY SORTS.** In the Prairie States April 10th is about the right time to set out plants into the field. In order to have plants ready at that time plant the seed in hot beds February 15th, covering the seed one-quarter inch deep. This will give you ample time to transplant into cold frames and produce sturdy plants to go into the field by April 10th. Have rows 3 feet apart and plant foot apart in the row. The soil for cabbage should be very rich with good drainage. Cultivate frequently. If the crop shows a tendency to head up all at one time and you have no ready market for the entire crop, loosen the roots in the ground by lifting the cabbages lightly. This will permit your cabbage to stand in the field from one to two weeks after maturity without bursting. **LATE CABBAGE.** Drill the seed in the open ground about the middle of June. About July 20th you will get from this sowing large and stocky plants which you set out in rows 3 feet apart and 18 inches in the row. Your crop will be ready in October and November. Number of days indicates days from setting of plants to marketable heads.

Which Cabbage Is The Best?

Cabbages differ in size, shape, earliness, color, flavor and keeping qualities. This makes a long list necessary.

Where only one variety is planted we suggest either **ALL HEAD EARLY** or **DELUX**.

If you want extreme earliness without regard to quality choose **COPENHAGEN MARKET**. If you like quality with fairly early maturity then plant either **EARLY SPRING** (round head) or **JERSEY WAKEFIELD** (conical head).

The medium early varieties are nearly all of good flavor. All Seasons, Early Flat Dutch, Early Summer, Faultless, Sure Crop and All Head Early are all good sorts. **GLORY OF ENKHOUSEN** has hard round heads and while of good quality is really not the equal of the other varieties mentioned.

For late cabbage either for Sauer Kraut or for storing, **LATE FLAT DUTCH** is the outstanding sort. The head is large, heavy and fairly solid, the ribs small, the leaves tender and the flavor excellent. It has been renamed quite a number of times and if you've raised cabbage of this description but under another name you've very likely had Late Flat Dutch. Nearly every seed catalog lists it under several names and ours is no exception.

DANISH CABBAGE like Danish Ball Head, Hollander, Dutch Winter, etc., are splendid keepers and for this reason splendid as late varieties. But they are coarse and have heavier ribs than Late Flat Dutch and are not quite its equal in flavor and tenderness.

RED CABBAGES, Black Diamond is fine early. Model best late. **SAVOY CABBAGES** have a crinkled leaf. Many prefer them claiming superior quality.

COPENHAGEN MARKET (70 days)

The heads are ball shaped, average about eight pounds each in weight, have a small core, and are produced on quite short stalks. Pkt. 10c; oz. 45c; lb. \$4.80.

GLORY OF ENKHOUSEN (75 days)

Early as Succession, heads medium sized, just right for market, perfectly globe shaped, of fine dark green color. It has only a few outer leaves permitting close planting. Good keeper and shipper, and may be pronounced a very desirable early sort.



JOHNSON'S DRUMHEAD (105 days)

One of the finest main crop sorts, of extra strong growth, the heads very large, round, flattened at top, remarkably uniform, extra hard, firm, and fine in texture. Average weight from 12 to 16 lbs. per head. Pkt. 10c; oz. 30c; lb. \$4.00, prepaid.

BUGNER (94 days)—Yellows resistant. Holland type. Pkt. 10c; oz. 40c; lb. \$3.80.



NEW CABBAGE DELUX (94 days)

THE MOST PROFITABLE LATE VARIETY
YELLOWS RESISTANT

The finest, most reliable, sure heading, longest keeping and best paying late variety. A few days earlier than Danish Ballhead, oblong in shape, very hard, very white inside, medium in size. One of our friends, a most successful gardener, says this about Delux: I had 10 thousand plants set early, and was cutting early and again late. My cabbage was fetching at first \$2.50 per bushel and the lowest I ever got for it was \$1.00 per bushel. We had a dry spell and it looked as though part of my cabbage will be a failure. Early in the fall I started for the field with a plow. But I did not plow my cabbage under. My Delux was all headed out and finer cabbage I have never seen. Out of the 10 thousand plants only six did not make a head. My grocer's customers actually begged for more Delux and I could have sold more had there been more. By planting early, you will have fine cabbage to sell early and again late, and early planting will give your cabbage a good start so that worms and bugs cannot hurt it. Delux is a first rate keeper, wilt resistant and can be planted close. Average weight per head eight pounds. Pkt. 10c; oz. 45c; lb. \$5.00.

CABBAGE WISCONSIN No. 8 (100 days)

A late variety, long keeping, a selection from the Hollander or Dutch Winter variety, bred for resistance to cabbage yellows. Should be planted where the cabbage crop is likely to suffer from yellows. Our strain is grown on soil infested with yellows by a specialist and can be depended on to produce a good crop on ground where other cabbages would fail. It is 100% immune from disease. A splendid keeper, properly stored, will keep in prime condition till spring. Pkt. 10c; oz. 50c; lb. \$6.40.

CABBAGE GREEN ACRE (70 days)

Green Acre is a new variety, heads round like a ball solid and heavy, enveloping leaves clear glossy dark green, suggesting "fresh" appearance. Stalks short. About 85% of the crop is ready to cut 70 days from transplanting, the balance of the crop is ready within 10 days after that. Good yielder, reliable crop producer and keeps for a long time in storage, retaining its fresh green color. Pkt. 10c; oz. 50c, prepaid.

GOLDEN ACRE CABBAGE (65 days)

An early variety of Copenhagen Market type, but several days earlier. Heads round, solid and ready to cut at almost one cutting. Pkt. 10c; oz. 45c; lb. \$4.80.

YELLOWS RESISTANT GOLDEN ACRE

Identical in every respect with regular Golden Acre, this strain is yellows resistant producing first class crops on diseased soils.

EARLY JERSEY WAKEFIELD (62 days)

Extremely early variety very valuable for home and market garden as well as for shipment. Plants very small and compact, allowing very close planting; stem short. Heads conical, usually 7 in. long, 5 in. thick near base, firm and weigh 2-2½ lbs. Pkt. 10c; oz. 45c.



CABBAGE—EARLY MONEY (63 days)

Earlier than any other Cabbage grown. Sure Money Maker

Early Money Cabbage makes fine, round, solid heads weighing from 3 to 5 lbs. each; several days ahead of any other variety. It will make money for the gardener and more friends for us. Except that it is earlier, it resembles the Copenhagen variety, and like Copenhagen it is not suited for storing although it will keep in prime condition for at least sixty days after maturity. For an early crop and to win dollars and new customers for the market gardener, it stands alone. Pkt. 10c; oz. 45c; lb. \$4.80, prepaid.

EARLY SPRING CABBAGE (62 days)

Early Spring is fully as early ripening as the famous Jersey Wakefield. The heads are round, slightly flattened, attaining a weight of about six pounds each. The plant is of uniform dwarf growth, has but few outside leaves, and can be planted as closely as 20 inches apart. A great feature about this cabbage is that it heads firmly at an early stage of its growth so that fine, hard heads although small, can be obtained long before it is fully matured.

CABBAGE—ALL HEAD EARLY (78 days)

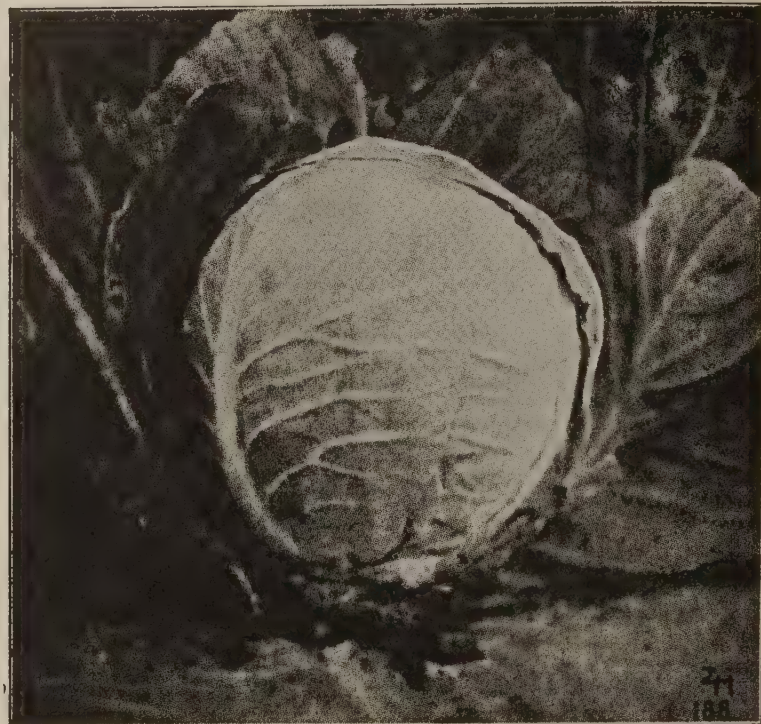
Best sort for those who plant but one variety of cabbage. It is the earliest of all large cabbages, sure to head, and uniform in shape, size and color, and of high quality. Pkt. 10c; oz. 30c; lb. \$4.00.



YELLOWS RESISTANT GLOBE (85 days)

An excellent mid-season cabbage, selected from the Glory of Enkhuizen; very uniform. It is a few days later than the Marion Market, but is inclined to produce somewhat heavier head. An outstanding feature of this variety is the unusually short core. Pkt. 10c; oz. 45c; lb. \$5.00.

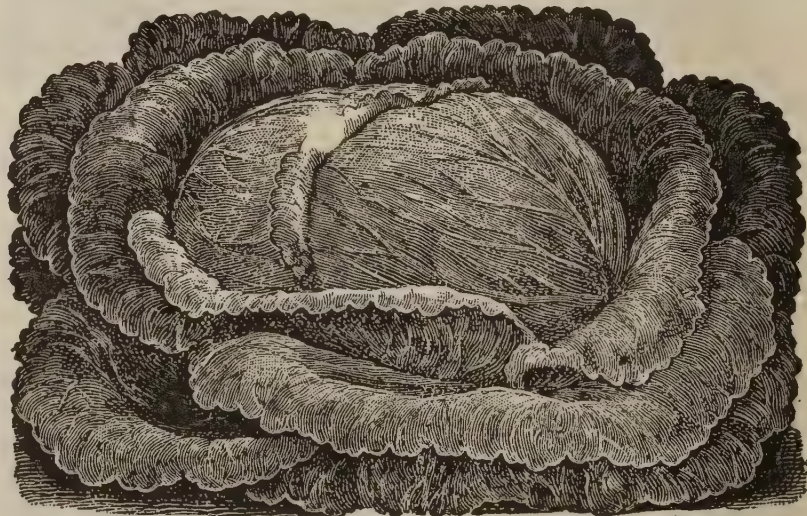
THE QUALITY of our seeds is the very best every time in all cases. In actual field trials we find that our seeds are the equal and in MANY cases of better quality than seeds from other sources. Lower prices asked by us NEVER mean low quality. Our policy is—give the customer most for their money.



PENN STATE BALLHEAD (105 days)

Penn State Ballhead produces compact, slightly flattened ball-shaped heads, much heavier for their size than those of ordinary strains. In repeated tests over a period of years it produced a yield of over twenty tons per acre.

It was tried by many growers located in different parts of the country. All are very enthusiastic, expressing their satisfaction in such terms as: Most wonderful cropper—splendid keeper—never before were we so well repaid—the crop and profit was quite beyond our expectation—etc. Penn State Ballhead can be planted quite close, is extremely slow to crack. Pkt. 10c; oz. 50c; lb. \$6.00.



LATE FLAT DUTCH (105 days)

The old type staple late variety, introduced here from Europe by the first settlers. It has so many good qualities that it is simply indispensable.

In prolonged dry spells the plants show the amount they suffer, it looks as though there will be no crop, but as soon as rain falls and the weather cools off, the plants quickly revive and make good. Whenever you plant Late Flat Dutch you are on the safe side. Pkt. 10c; oz. 40c; lb. \$4.00.

CHARLESTON WAKEFIELD (73 days)

An improved and larger form of Early Jersey Wakefield, about a week later in maturing, but yielding fully twice the crop of the original Jersey Wakefield Cabbage. It has a less pointed head than its ancestor, is a first-rate shipper and well liked by all who are acquainted with this variety. Pkt. 10c; oz. 40c; lb. \$4.00.

FOR MORE CABBAGE please see the front pages of this catalog.

DANISH BALL HEAD, SHORT STEM (100 days)

Popular because of its great solidity of head and its unequalled keeping and shipping qualities. The heads are very hard, fine grained, and will weigh one-fourth more than other varieties of equal size. Our seed is very high bred and cannot be excelled in quality. Genuine Amager Island grown. Pkt. 10c; oz. 50c; lb. \$6.00.



CABBAGE MARION MARKET (80 days)

The MARION MARKET was originally bred up from Copenhagen Market, but differs from the latter in several respects. It takes about ten days longer to mature than the early strains of Copenhagen and produces a much larger plant. The heads are practically round, very hard and stand shipment well. The quality throughout is excellent, and a favorite for early Kraut. It is very highly resistant to the Yellows and we have seen this variety yield as high as 26 tons per acre. Of unusual vigor, will make a crop under most unfavorable growing conditions. Plant growers that grow several varieties of cabbage will notice that the plants of Marion Market have extraordinary heavy smooth, round stems, an unmistakable sign of vigor. Pkt. 10c; oz. 50c; lb. \$6.00.

EARLY FLAT DUTCH, STEIN'S (90 days)—An excellent sure heading, heat and drought resisting, short stemmed cabbage, very popular in all parts of the country in spite of the fact that it is one of the oldest of cabbage varieties. Produces large, firm heads that are 5-6 inches deep, 8-9 inches in diameter weighing 5 to 7 lbs. A good keeper and a real quality cabbage. Pkt. 10c; oz. 40c; 1 lb. \$4.00.

OTHER CABBAGES

ALL SEASONS (85 days)—Heads round, flat, weighing from 10 to 12 lbs. each. Of high quality and a sure header.

EARLY FLAT DUTCH (90 days)—Round flat, quality good. Resists heat and therefore popular in the South.

EARLY SUMMER (85 days)—Round, flattened, white inside, bluish green outside.

EUREKA (62 days)—True stock making a crop even in rather poor soil.

FAULTLESS (85 days)—Round flattened heads, sure heading and of very high quality.

PREMIUM FLAT DUTCH—Same as late Flat Dutch.

SUCCESSION (85 days)—Round flattened heads.

SUREHEAD (105 days)—Sure header, quality good.

PRICE—Any of the above: Pkt. 10c; oz. 40c; lb. \$4.00.

BIG CROP OF KALE

three and four times as much per acre will you get by sowing our Evergreen Gem Kale.

CONSULT the front pages of this catalog. You will find many important novelties listed on those pages.



WISCONSIN ALL SEASONS (90 days)

Yellows resistant. Type similar to the old variety and the season about the same. It is the hardiest of all the flat-head varieties, an excellent Kraut cabbage. WISCONSIN ALL SEASON is known to stand unfavorable conditions of drought and hot weather unusually well. For this reason it is a very choice variety for the home garden for late summer and early fall use. It does not burst as readily as other varieties after heading up. Pkt. 10c; oz. 50c; lb. \$6.00.

CABBAGE SHORT STEM HOLLANDER Special Strain (100 days)

Forms extremely tight heads with practically no hollow spaces, perfectly globe shaped of medium size.

Will come out of storage in better shape than other cabbages because it has several layers of dark green outside leaves. You remove one, you remove another layer of the outside leaves and you still have a head of cabbage as fresh looking as if it was cut recently.

There are several strains of Hollander. Checked up in extensive field trials our Special Hollander was found the best strain. Pkt. 10c; oz. 50c; lb. \$6.00.

CABBAGE EARLY MARVEL (61 days)

You will make some extra profit by growing Early Marvel. Positively the earliest cabbage, with large heads, in existence. The heads are ball shaped, slightly elongated, very hard, very white inside, of fine quality, weighing 5 to 8 lbs. per head. The crop comes almost all at once, and every plant that you will set out will make a head. Early Marvel can be marketed long before fully developed. If left standing in the field when fully developed, will not burst for several weeks. Heads very hard, leaves have small midribs, eating quality very high.

LOUISIANA COPENHAGEN (70 days)

Can be planted very close having a spread or width of 18 to 20 inches while the plants of regular type have a spread of 26 to 28 inches. Heads average 2½ lbs. in weight, are very compact, somewhat coarse ribbed. Frost does not check it in growth, will not run to seed in the South when grown as a winter crop. In the North can be planted earlier than other cabbages, late frost not harming it. Best Danish grown seed.

YELLOWS RESISTANT CABBAGES

YELLOWS IN CABBAGE—The plants turn yellow, the leaves drop off the stem and finally the whole plant dies. In such case the only remedy there is, is to grow only yellows resistant varieties. To be benefited you must have ONLY first generation seed.

To get a crop of cabbage on soils sick with yellows, Yellows Resistant varieties must be used. How did yellows resistant strains originate? A field of cabbage was destroyed by yellows excepting here and there a plant. From these, seed was saved, plants raised and set out in yellows sick soil. This time many plants made good solid heads. From these healthy cabbages seed was saved, plants raised and again set out in yellows sick soil. This went on and on until today we have several varieties that are immune from the yellows disease. The following varieties listed by us are Yellows Resistant: Bugner, Yellows Res., Golden Acre, Delux, Yellows Res. Globe, Marion Market Wisconsin No. 8 and Wisconsin All Seasons.

Savoy Cabbage

CULTURE—Savoy does not require the intensive culture common cabbage does and will make a good crop on even comparatively poor ground. Should be treated like early cabbage. All Savoy are superior in flavor but they do not keep long.

MARVIN'S SAVOY CABBAGE (100 days)

Most popular and best of all Savoy. Heads large, solid, very curly, having only a moderate amount of outside foliage, growing closely about the head. Of excellent quality and flavor. Pkt. 10c; oz. 40c.



Savoy Cabbage—Early Vienna

SAVOY EARLY VIENNA (85 days)

The heads of this are round, dark green, exceedingly curly formed on short stalks, weighing from 3 to 5 lbs. each. It is quite an old variety, yet it must be classed as one of the very best. Pkt. 10c; oz. 40c.

ITALIAN SAVOY ASTI LATE (100 days)

Italian Savoy Cabbage (Cavolo di Milano) is a variety especially adapted for warm countries and about the only variety that will make a solid head in the South. It never fails to make solid heads, finely curled, perfectly round and weighing from 3 to 5 lbs. each. It grows on a short stalk, and the heads are produced in 40 days from the date of setting. It is a sure cropper, whether planted in the fall or in the spring. We have the genuine seed from one of Italy's best seed growers. Pkt. 10c; oz. 40c.

SAVOY WINTER KING (100 days)

Heads very solid, perfectly ball-shaped, extra fine curled, medium sized and of beautiful dark green color. Extremely hardy. The finest late maturing variety at present. Pkt. 10c; oz. 45c; lb. \$4.00.

SAUERKRAUT—Mix finely cut up cabbage with salt. One heaping tablespoonful to a gallon of cabbage. Press into the jar, tamp it as solid as possible then cover up with a few cabbage leaves, place board and heavy rock on top, keep in a warm place for two weeks then move to the coolest place at your disposal. If you should not have enough brine add water as sauerkraut must be submerged at all times to prevent spoiling.

SOW IN FLATS is mentioned often in this catalog. A "flat" is a box 18 in. long, 12 in. wide and 3 in. deep. A flat holds 100 plants once transplanted and fits the standard frame or hot bed. The bottom of flat must not be close fitting to assure perfect drainage and to insure perfect drainage all experienced growers lay on the bottom "short" manure or straw. The flat is filled with sifted soil, the soil is shaken down but NEVER packed down and this again in order to insure good drainage. Without good drainage healthy and robust plants are out of question.

Ours is the most critical trade—gardeners and florists. We cater to the wise and experienced. We give value. Among our customers are the foremost florists and market gardeners.

Red Cabbage

BLACK DIAMOND (90 days)

A new second early Red Cabbage from Holland, is meeting with great popularity with all lovers of Red Cabbage on account of its fine appearance and deep red, almost black color. Heads medium sized, very hard and heavy, leaf rib thin and small. Pkt. 10c.

MAMMOTH ROCK RED (100 days)

Produces large solid heads, often weighing 12 pounds each. Always sure to head and of good red color to the center. Pkt. 10c; 1 oz. 50c.

RED CABBAGE MODEL (100 days)

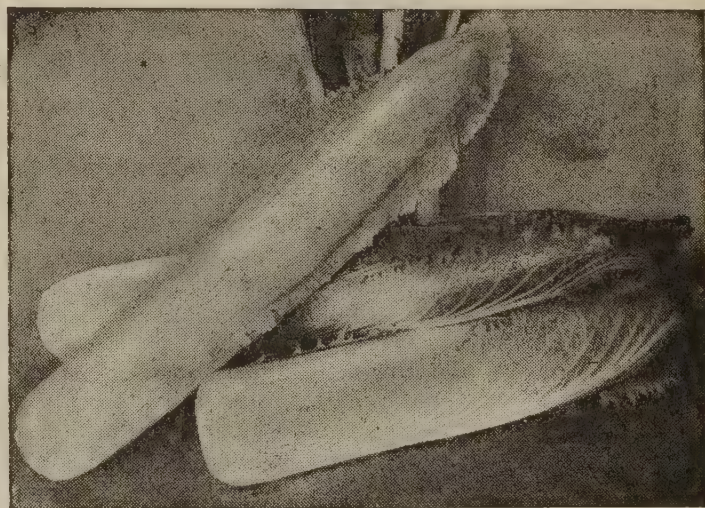
A PERFECT LATE VARIETY

Late, long keeping variety. Deep red all through, ball shaped, compact, averaging 8 lbs. per head. When stored keeps in prime condition till spring. Pkt. 10c; 1 oz. 50c.

Chinese Cabbage

Culture—Chinese cabbage succeeds in cool weather only. It is easily raised if seed is sown late in July or early in August. The plants develop quickly, forming large solid heads well blanched in the hearts. Sow the seed thinly where the plants are to mature as they do not stand transplanting well. Have rows 2 ft. apart and 20 inches between the rows. Chinese Cabbage is much milder in taste than ordinary cabbage, it is used boiled as well as raw in salads or made into delicious cold slaw.

Will not stand heavy frost and must be pulled root and all with soil attached and stored in a frost proof cellar.



CHIH LI (75 days)—Earliest of the Chinese group. Heads long, solid, white, shaped like a roller, two feet in length. The best for high class trade. Pkt. 10c; oz. 40c; lb. \$3.20.

CHINESE CABBAGE WONGBOOK (80 days)—Heat and drought resisting variety, forming large, broad and heavy heads one-third shorter than those of the regular PE TSAI. Of very high quality. Pkt. 10c; oz. 40c; lb. \$3.20.

MONEY FROM SAUERKRAUT

You can make some extra money by making sauerkraut. Make it early in the season. Do not wait for cool weather. There are many people that would buy it. These people do not buy ONLY because there is no sauerkraut to be had at the time. One can always buy sauerkraut in cans, but many, do not want canned sauerkraut.

If you want sauerkraut of the finest quality use either Early or Late Flat Dutch cabbage for this purpose. Inform your customers in plenty of time that you will have high class home made sauerkraut.

You can also sell tomatoes made into Catsup, chow chow, etc., dill pickles, pickled onions, beets, etc. You will prosper if what you put up, will be of the highest quality.

MORE MONEY FOR CABBAGE

You will get more money for early cabbage if you will start the seed in frames as is the usual practice—BUT—not crowd the plants. Give them plenty of room, twice as much as you used to do. You will have robust plants with stems as big around as your little finger and such plants you will set out instead of the spindly things raised in an overcrowded box. Following this method you will gain from 15 to 20 days and get for a dozen heads more than you will later in the season for two dozen.



CARDOON LARGE SMOOTH

We offer extra select strain way superior to the old artichoke leaved variety, producing stalks twice as heavy and tall. Requires rich soil. Favorite vegetable with the Latin peoples (French, Italian, Spanish).



Chives—Schnittlauch

This vegetable is a perennial plant growing in thick tufts and is related to the onion but never forms a bulb. The edible part is its grass like, deep green, hollow leafage. The leaves finely cut are used for flavoring soups, scrambled eggs or are mixed with cottage cheese. The leaves can be cut throughout the summer till frost. Their flavor is onion like, very mild and pleasant. Pkt. 10c; ½ oz. 50c. Plants: 25 for 25c; 80c per 100, prepaid; \$4.00 per 1,000, not prepaid.

Dandelion

Sow in the spring in drills quarter of an inch deep and foot apart, thin out the plants to 6 inches apart. Cultivate. The crop is ready the following spring. You can also sow the seed in June and up to middle of July. Mix some radish seed with the dandelion to mark rows for early cultivation. Your crop will be ready the following spring. To improve the quality, blanch by covering the plants with boards. Dandelion is used as salad, prepared like spinach, etc., and is rapidly gaining in popularity. A superior strain placed on the market is bound to sell with profit to the grower in most any market.

MAMMOTH THICK LEAF DANDELION—Of robust growth, plants heavy, leaves thick of superior quality. Pkt. 10c; oz. 60c.

CHERVIL

(Koerbel-Cerfeuil). A vegetable similar to parsley, but handsomer. Used for flavoring soups and salads, also for garnishing. Has a strong flavor and perfume.

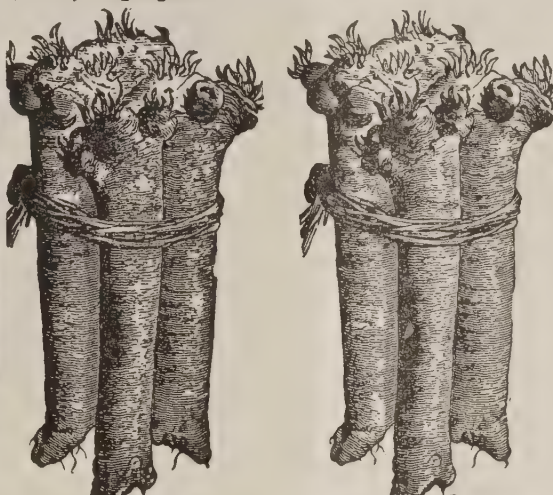
Do you know that we are the actual growers of many seeds we sell?

EVERY GARDENER

should have a patch of asparagus, balm, chives, green onions, mint, rhubarb, sage and where possible also of watercress. These perennial crops once established need hardly any care, bringing a steady income for years after planting.

Bohemian Horse Radish

The roots are very large and the flesh snow white. It matures somewhat earlier than the ordinary kind. The greatest value of this variety lies in the fact that it is very hot to the taste and at the same time agreeable and sweet. Sets ready for planting. Dozen, 30c; 50 for 75c; 100 for \$1.35, postpaid. 1,000 roots \$10.00, unprepaid.



CULTURE—Plant in rich soil, foot apart in rows. Plow the field early in the Spring, allow 10 days for the soil to settle then take a stick, drive this into the ground in a slanting way, place your sets in the openings, then firm the soil. Using stick in planting is very important as well as placing the sets into the openings straight. If the sets get bent while being placed in the openings you will get crooked roots that are of far less value than long straight roots. The bulk of the crop is made in the fall, while the weather is cool therefore wait with the digging to the last—dig just before heavy frosts. When making your own sets see to it that they are free from black spots, 8 to 12 in. long and about the thickness of a pencil. It takes 15 thousand sets planted 3x1 to set an acre.

COLLARD

Georgia White Cabbage

A cross between cabbage and collard with a flavor like cabbage and heading up like cabbage. It never winterkills and the firm heads which are almost as large as those of cabbages can be left on the plants and harvested during the winter as needed. The heads are round and either raw or boiled delicious in flavor. More tender and whiter than the Blue Stem variety and equally as cold and heat resistant. Pkt. 5c; oz. 15c; lb. \$1.60.

Georgia Blue Stem

The old popular variety, very tall and long stemmed leaves far apart. The leaves can be cropped and eaten, as the plant forms new leaves again. Pkt. 5c; oz. 15c; 1 lb. \$1.60 postpaid.

Collard Carolina Short Stem

Short stemmed, leaves large, spreading, fine flavored. Hardy and drought resistant. Popular upon first trial. Pkt. 5c; oz. 15c; lb. \$1.60, prepaid.

CHIVES A PAYING CROP

Do you know that you could sell lots of chives if you are located near a good sized town? In many cases the demand is more than the supply. Sow chives in the spring to get sturdy plants by fall. Leave them outdoors, they will not winterkill and about the middle of February spade out and divide the clumps so that one dozen clumps will fill out an ordinary flat, place flats in the hot bed or a greenhouse and in two weeks your chives will be 8 inches tall and ready for the market. In our town the growers get \$1.00 per flat and hundreds of flats are sold every spring. The first flats go to the market late in February when there is not much else to sell from the garden.

Collard Louisiana Sweet

A great improvement over the old Georgia Collard as it has large leaf area and less stem along with an appealing color and thick tender leaves. Pkt. 10c; oz. 20c; lb. \$2.00, prepaid.

CRESS

CRESS possesses a pleasant, slightly pungent flavor which is especially pronounced in watercress. Watercress besides being slightly pungent has a certain sort of perfumed taste which is hard to describe and which is very pleasant to the palate. Used as salad and for garnishing.



WATER CRESS—For growing along banks of ponds or streams. Easily raised from seed and once you start a plantation the plants will spread and you will have cress to cut forever.

CURLED GARDEN CRESS—A small curled plant with a pleasant slightly pungent flavor. Sow the seed early in spring. Pkt. 10c.

UPLAND CRESS—Similar to Water Cress but can be grown in any garden. Leaves smooth. Pkt. 10c; oz. 30c; 1lb. \$2.60.



Bavarian Garlic

The bulbs of this garlic are larger than those of the common variety, and keep very long. Selected fine sound bulbs. ¼ lb. 15c; ½ lb. 25c; 1b. 45c, prepaid.

GARLIC—Requires rich well drained soil. No fresh manure. Plant the cloves (divisions of the bulb) 3 to 4 in. deep in rows, foot apart and six inches apart in the rows. Can be planted early in the spring and again in August and September. The bulbs are ready to dig in September and should be stored in a frost free, well ventilated room.



CORN SALAD

CORN SALAD is an immensely tasty vegetable. It is rich in vitamins and mineral salts and can be had from spring till frost. It is tender even in hot weather when regular lettuce is out of the question. Does well everywhere in any kind of soil. Can be sown at any time up to September. There are many varieties, the tenderest of all is Large Green Cabbaging.

LARGE GREEN CABBAGING—Sow in the spring and again in August. Fall sown Corn Salad will stay green all winter if protected with hay or corn stalks.

Carrots

CULTURE—1 oz. for 100-foot row, 4 lbs. per acre.

Carrots are very hardy and can be planted as soon as you stir up from 2 to 3 inches of top soil. Have the rows 14 inches apart and thin to about 4 inches apart in the rows. Cover the seed half inch deep and tramp the ground firmly which insures quick germination. Cultivate frequently.

Successive sowings can be made in our section up to July 10th. Number of days indicates days from planting to bunching size.

HIGH CLASS CARROT SEED

Our carrot seed grows roots that have no hard core, are rich in color of uniform shape without the rosin-like smell characteristic to this vegetable. Prepared for table, the tenderness, sweetness and delicious flavor makes it a dish fit for the gods. Your customers can tell good carrot from poor. Raise the finest carrot there is from our seed, to make them come again.

BEST CARROT

I want the best carrot there is. That is what the customer says when he comes in person to our place.

There is no such a thing as BEST in carrots, or most other vegetables. Carrots differ in size, shape, earliness, keeping qualities, amount of tops, color and taste.

Every variety of carrot we offer is high class. None has qualities that would answer all purposes. Therefore plant French Forcing if you want carrots ahead of all others in earliness and if willing to grow carrots under glass. If you want the earliest carrot for bunching with an appealing shape and good color you must grow Gold Coin, because that is the best variety for early sales. If you want highest quality and fair crop and a carrot that will keep over winter Nantes is what you want. If you want a carrot that will give you immense crop and will keep, properly stored, till spring Oxheart is the sort and if you want a large stump rooted carrot the kind that sells in any market, is good for growing on a large scale, South or North, you want Danvers or Chantenay.

CARROT IMPERATOR (77 days)

A type of Chantenay, but the roots are better filled out, not tapering quite as much as Chantenay. They are of extra fine appearance, deep orange, of fine texture, tender and sweet. Pkt. 10c; oz. 40c.

We recommend Emperor for light soils only. On heavy soils it seldom properly develops, it will not ripen up and for heavy soil Chantenay or Danvers are to be preferred.

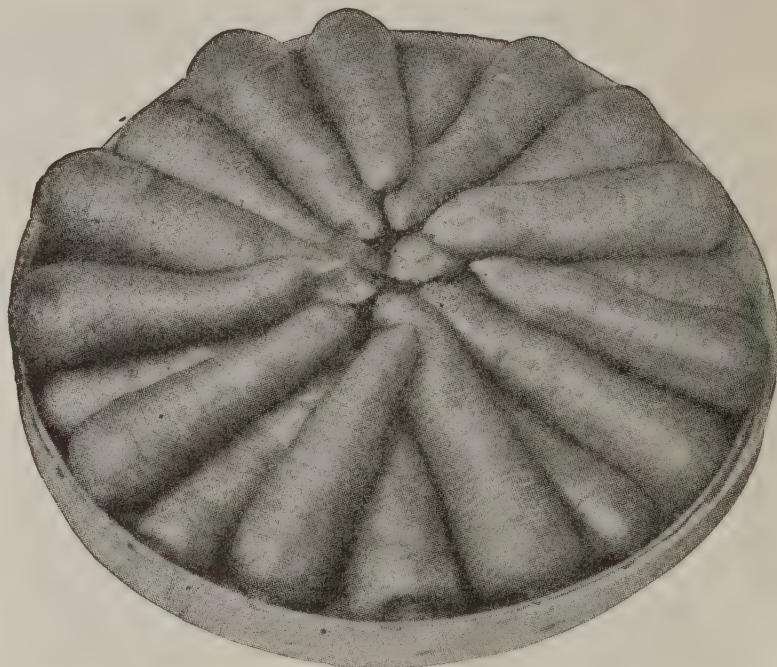
CARROT SELECTED DANVERS (75 days)

The roots are almost cylindrical, stump rooted, of fine rich, orange red color. Flesh fine grained, crisp, tender, with a very little core. A very heavy cropper, 30 tons of roots per acre being no exceptional crop. It is a very important variety with market gardeners. Realizing this, we are constantly improving our strain of this carrot, and can definitely pronounce it the finest in cultivation. Pkt. 10c; oz. 40c; lb. \$4.00.



GUERANDE OR OXHEART (72 days)

Roots short and very thick, only about 6 inches long and fully 4 to 6 inches in diameter. Grows very rapidly and the roots attain a weight of more than a pound each. Excellent in quality. Will prove quite profitable for the market gardener. Pkt. 10c; oz. 40c; 1 lb. \$4.00.



CARROT EARLY CHANTENAY (72 days)

First class variety for bunching, shipping as a bushel carrot and for storing. Half long, abruptly stump rooted or square at the end, smooth, of rich red-orange color in and out that is retained even when the carrots are boiled. Flesh firm, fine grained and very sweet. Tops medium size just right for tying. Can be bunched at any time after it has made half of its growth. Average yield per acre 30 tons. Our seed of this as well as all carrots is EXTRA SELECT. Pkt. 10c; oz. 40c; lb. \$4.00.



CARROT AMSTERDAM FORCING (72 days)

Extra early variety, forming handsome, smooth, medium large, stump-rooted carrots of deep orange color. Pkt. 10c; oz. 40c; lb. \$4.00.

CARROT CORELESS NANTES (70 days)

Roots, cylindrical, smooth, bright, orange, becoming yellow in center, but with no distinct core. Of the finest quality and one of the most symmetrical and handsome of the medium sized sorts. Pkt. 10c; oz. 40c; lb. \$4.00.

ST. VALERY (80 days)—This is an extra fine variety, an improvement over Imp. Long Orange. Pkt. 10c; oz. 40c.

CHANTENAY SPECIAL (72 days)—Same as regular Chantenay with somewhat shorter tops and very small core. The core is nearly the same color as flesh. Easy to tie. Fine for long distance shipping. Pkt. 10c; oz. 40c.

FRENCH FORCING (60 days)—Of all carrots this is the earliest. Roots round, 2 inches in diameter, orange, red, sweet, of highest quality. Pkt. 10c; oz. 40c.

CARROT GOLD COIN—See novelty pages

WHENEVER PRICES are not quoted in our catalog it means that we are unable to supply the seed.

Cauliflower

CULTURE—1 oz. for 3,000 plants, $\frac{1}{4}$ lb. per acre.

For an early crop sow March 1st in hot beds. For late crops sow in the early part of June in rows a foot apart. When plants are well developed they are set in rows 4 feet apart and 2 feet apart in the rows. If possible use liquid manure and apply around the roots of the plants as soon as growth starts. This will make wonders. You hardly can give cauliflower too much fertilizer. When heads begin to form, gather the leaves loosely together and tie them at the top to prevent the sun from injuring the heads.

As a rule cauliflower is a paying crop. To produce large compact, snow-white heads requires skill on the part of the grower, also great care in handling the crop. When packing cauliflower see to it that the heads will not bruise. The use of paper sometimes helps. Bruised heads show brownish spots and are hard to sell. Good crop of cauliflower can be raised anywhere in the North using early varieties, provided the weather is fairly favorable. Late varieties do well in the South as a winter crop and a good crop is easily raised if one can water heavily in case of need. Late cauliflower produces heads of immense size and almost of as good quality as the early sorts.

WHICH IS THE BEST CAULIFLOWER?

The finest **EARLY** Cauliflower is at present **Early King**. If you want an early cauliflower for both early and later Danamercia is extra good.

Dry Weather is a fine sort that is easily raised.

The best cauliflower for plant production to meet the demand from the general public is **Autumn Giant**. Produces very large, firm, very white heads in the fall in spite of unfavorable weather. The seed is inexpensive but will produce results for those that will buy the plants.

SNOWBALL CAULIFLOWER (55 days)

Produces white, solid heads, 9 to 14 inches across, and deep in proportion. That is our strain of **Snowball**. Cauliflower is a vegetable that has to be grown with certain care. It must be sown and transplanted at the right time, and planted in well-prepared rich soil. This done our seed will be found very superior. Pkt. 20c; oz. \$2.00; lb. \$28.00.

EARLIEST DWARF ERFURT (54 days)

Popular with many gardeners. Quite similar to **Snowball**, except that it is a trifle earlier. Under good treatment every plant produces a fine large snow white head. Pkt. 20c; oz. \$2.00; 1 lb. \$28.00.

DRY WEATHER OR DANISH GIANT (67 days)

Reaches perfection where other sorts fail. Especially valuable in dry seasons and also in the South. It produces very large, perfectly-formed white solid heads, maturing about a week later than **Snowball**.

AUTUMN GIANT (125 days) Reliable late sort, producing very large, heavy and fine heads. Popular on the Pacific Coast, where it is known under the name of **California Wonder**.

LARGE LATE ALGIERS A vigorous variety that will stand lots of neglect and is certain to head. Heads well formed, very large and heavy, perfectly white, and handsome. Succeeds in all parts of the country and can be depended upon to produce fine heads of extraordinary large size during fall months. (105 days). Pkt. 15c; oz. \$1.00; lb. \$12.00.

ITALIAN GIANT—Late cauliflower, very large and heavy. (105 days).

CALIFORNIA WONDER—Same as **Autumn Giant**, an excellent late cauliflower.

BROCCOLI ST. VALENTINE (70 days)

Produces large, white, handsome heads, closely resembling cauliflower in appearance—in fact, being sold as cauliflower in every grocery store during the winter months; the buying public not knowing the difference. A highly paying crop for any gardener located South or on the Pacific coast.



CAULIFLOWER SUPER SNOWBALL

Matures evenly, producing solid, pure white, finely grained heads of great depth and superbly beautiful in appearance. The seed we offer is originator's stock. Pkt. 20c; oz. \$2.65; 1 lb. \$32.00. Matures in 55 days.

Broccoli

There are many varieties but in this country only a few sorts are grown. **White Rose** and **St. Valentine** are varieties resembling cauliflower in appearance so closely that the product is marketed and sold in the stores as cauliflower. However, there is a difference between the two. Broccoli does not possess the fine, delicate flavor of cauliflower. The plants of Broccoli grow tall, are of robust growth and will produce a crop under adverse growing conditions.



CALABRESE BROCCOLI (58 days)

The plants, about 30 in. high, produce many branches terminating in cauliflower-like rosettes, which together with the heavy fleshy stalks are the edible parts of the plant. Exceedingly tender, buttery in flavor, a delicacy of the high-ets order. Prepare for table same as cauliflower. For an early crop sow March first under glass and in May or early June for a late crop. Plant in rows 3 ft. apart and 18 in. apart in the rows. For market cut the heads with about a foot of stalk and to 2-3 in a bunch. **SPECIAL STRAIN**. The strain we offer is the best and the most profitable strain in existence. Pkt. 10c; oz. 50c.

SPARACHETTI—A type of Sprouting Broccoli favored by the Italians. Pkt. 5c; oz. 40c.

BROCCOLI WHITE ROSE

New. Two weeks earlier than **St. Valentine**, of very high quality, more like cauliflower in quality and taste than any known broccoli. Heads very firm, deep, heavy and fine texture. Hardy and sure heading. The best of all broccolis of cauliflower type at present.

Celery

CULTURE—1 ounce for about 2,500 plants, 1 lb. required for one acre.

As celery seed is very slow to germinate we suggest planting the seed in hot beds covering about $\frac{1}{8}$ inch deep, wetting the bed thoroughly and covering with burlap to hold the moisture and hasten the germination. Sow about March 1. When plants come up remove the burlap and keep the bed ventilated to prevent damping off. When the plants are about 2 inches high transplant in the hot beds 3 inches apart each way. When they are 4 inches high cut off the tops which will induce stockiness. The plants will soon grow again and when they get 6 inches tall set out in the open in trenches 6 inches deep and 6 inches apart in the trenches cutting off the outer leaves pressing the soil firmly around the roots.

Number of days from setting of plants.

BLEECHING CELERY—Let the plants grow to full size, lift them with clumps of dirt, place them in a trench which must be boarded to avoid the sides crumbling into the pit. The pit must be deep enough to allow at least 10 inches of head room. Cover the pit with boards to exclude all light. Lift the boards and ventilate in case of warm weather to avoid rot in the plants. The plants must be watered but never from the top. Let the water run on the ground, see to it that the water reaches the roots but never any part of the plants. In hard freezing weather protect the plants by placing hay, straw, etc., on top of the pit. Celery will stand pretty low temperatures but no real hard freezes. There are other more efficient, more economical ways of bleaching celery. Full information is contained in Farmer's Bulletin No. 1269, which you will get free of charge if you will write to the Department of Agriculture, Washington, D. C.



TALL GOLDEN SELF BLANCHING CELERY (120 days)

Highly disease resistant, earlier, taller and heavier than the original Dwarf strain. Of better appearance, very high in quality and a remarkable good keeper. Has met with favor in every market. Height 26 to 28 inches. Pkt. 10c; oz. 50c; lb. \$5.00.

Which Celery Is the Best? The earliest and best paying variety is Florida Golden. Golden Self Blanching, a little later variety, is firmer, slightly better keeper and withstands unfavorable weather well. The tall strain is the coming variety for long distance shipping. Trade Builder, is high class in quality and always profitable. Giant Pascal makes finest looking plants, heavier than most other varieties of attractive deep green color and is the best variety for growing plants for sale to the general public.

UTAH CELERY (125 days)

Also known as golden Crisp and Salt Lake is a green type of celery stocky, full hearted and compact. Blanches readily. Stems thick solid medium broad full rounded and of nutty flavor and extra good quality. Blanches white. Resembles the Giant Pascal variety and is considered as one of the best for late use and storage. Our strain is a great improvement on the old type in being earlier, taller-growing and easier blanching type. Pkt. 10c; oz. 60c; lb. \$8.00.

CELERY GOLDEN PLUME (85 days)

Our new improved strain No. 4102 is filling the need for a taller longer stemmed Golden Plume. Just as easy to blanch as the original strain but is more compact in form, straighter and better "shingled." Much better adapted to standard crate. Heavy producer. Normally 24 to 26 inches tall with stems $7\frac{1}{2}$ to $8\frac{1}{2}$ in. long with very full hearts. Pkt. 20c; oz. 60c; lb. \$10.00.

CELERY TRADE BUILDER (130 days)

Plant 16 inches tall, stocky, heart large and full, creamy yellow. Stalks broad, thick and meaty, crisp, very tender and so brittle that it will not stand distant shipping. It stands alone in quality, which is wonderful in the full meaning of the word. This is a celery that will appeal to the fancy class of buyers and will fetch fancy prices. It will advertise you as a skillful gardener and producer of a perfect product. Grow Trade Builder for your local market. You will sell it easily with a pleasing profit at any time. Medium early, a wonderful keeper and high class as a winter sort. Pkt. 10c; $\frac{1}{4}$ oz. 12c; oz. 45c; lb. \$3.00.

GIANT PASCAL or WINTER KING CELERY

Large, solid, crisp and of sweet nutty flavor. Color, ivory white, long thick and stringless, while the heart is golden yellow and very attractive. Pkt. 10c; oz. 50c; lb. \$7.00, postpaid. (140 days)

SUMMER PASCAL (125 days)—Vigorous, compact green type, resistant to blight. Easily blanched and very attractive in appearance. Height 26 to 28 inches, stems 9-10 inches long and very heavy. Of most excellent quality and about the best of the so-called green celeries. Pkt. 10c; oz. 80c; lb. \$8.00.

EASY BLANCHING—Splendid early sort of vigorous erect, compact growth. Stalks thick and solid. Blanches easily. (110 days). Pkt. 10c; oz. 60c; lb. \$6.00.

DWARF GOLDEN SELF BLANCHING—Plants short, stocky with well filled heart ribs broad. Height 18 in. Pkt. 10c; oz. 45c; lb. \$4.50.

WINTER QUEEN (125 days)—Late, long keeping variety, quality very high. Height 24 in. Pkt. 10c; oz. 20c; $\frac{1}{4}$ lb. 50c; lb. \$2.00, postpaid



CELERIAC GIANT PRAGUE

Round, smooth roots with very few side roots. Pkt. 10c; oz. 20c; $\frac{1}{4}$ lb. 50c; lb. \$2.00, postpaid.

PRAGUE MODEL CELERIAC Larger in size than the old Giant Prague, has small rootlets, and few in number, and is of fine flavor with Pkt. 10c; oz. 30c.

LARGE ERFURT CELERIAC—Roots large, smooth and almost round. Pkt. 10c; oz. 30c.

CELERIAC—In order to get large, firm, solid, tender and smooth bulbs, celeriac must be grown in very rich soil. Soil heavily fertilized with WELL rotted manure is the thing. Frequent cultivation is essential and the crop must never be allowed to suffer from lack of moisture, in fact celeriac can hardly be overwatered. Never use fresh manure as this tends to make the bulb too big and hollow inside. Celeriac is a paying crop in localities with large German or Bohemian population. The Germans are extremely fond of it using it boiled, cut in cubes in combination in potato salads. Celeriac is a delicacy of the highest order.

GREEN CELERY—Growers call all varieties of celery that AFTER blanching retain green tops "green" celery. To this class belong the following varieties listed by us: Easy Blanching, Trade Builder, Crispheart, Winter Queen, Utah and the Pascal varieties. The others are "yellow" celeries.

Sweet Corn

One Pound for 150 hills, 10 to 12 lbs. in hills for an acre.

CULTURE—Plant in rows 3 feet apart in hills $3\frac{1}{2}$ feet apart, drop in each hill 4-5 seeds, later thin out to two plants in each hill. Closer planting than this means, even on rich ground, less and smaller ears. Plant deep, 3 to 4 inches, so that in case of frost the plants will have a chance to come up from the root which unless the frost is very severe are unhurt.

Which Sweet Corn Is the Best? Best varieties in yellow are: Golden

Hummer extra early hybrid, Sunshine, extra early and large eared, Golden Rod with heavy ears of very high quality, Whipple's Yellow, a wonderful variety, ears of largest size sweet and tender. In white Sweet Corn the leaders are Early Reliance, Vanguard and September Morn.

HYBRID CORN must be produced each year by artificial crossing and will not give satisfactory results unless this is done. Some of our customers report good result from home-saved seed for one season only. The only way to get the benefit of higher yields and better quality is to use seed crossed by specialists of which we are dependable suppliers. **TO PREVENT SMUT** on corn treat with semesan. Ask the dealer which semesan to use. There are more than one kind. To prevent damage from worms in ears of corn one would have to spray the silk every morning till the ears were in picking stage. That would cost so much that it would never pay to do so. Where worms are bad we recommend to grow varieties with heavy husk such as Vanguard and all Hybrid varieties.

DAYS TO PICKING—This varies. If the weather is not favorable the crop may come from 2 to 8 days later than stated by us.

SWEET CORN EARLY RELIANCE(79 days)

Ears of Good Size—Quality First Class

EXTRA EARLY

Ready for the market days ahead of Evergreen, ears the size of Evergreen and every bit as good as Evergreen in quality and sweetness.

Ready for the market days ahead of any other variety of anywhere near its size. Not only is Reliance distinctively earlier but the ear is of good size with white grain of really good quality. The plant growth seldom exceeds four feet in height, the ears borne close to the ground 7 to 8 inches in length, blocky in shape and well filled with glistening white grains in rows of 12 to 14. A real sweet corn, which we recommend unhesitatingly to all gardeners being convinced beyond the shade of doubt that Early Reliance will make money for them and help to make the business of gardening more interesting and worth while. Pkt. 10c; lb. 40c, prepaid. F. O. B. 10 lbs. \$2.20; 100 lbs. \$20.00.

EARLY GOLDEN ROD (82 days)

Early—Ears Long—Heavily Productive

Ears from 8 to 10 inches in length, with twelve to eighteen rows of deep, golden yellow, lusciously sweet kernels. The kernels are in absolutely straight lines on the cob and nicer looking ears are hard to imagine. A variety that will sell no matter at what time it is placed on the market. The ears of Golden Rod remain tender, in milky condition longer than any other known sort and the stalks bear never less than two perfect ears and quite often three. Pkt. 10c; lb. 40c, prepaid. F. O. B. Council Bluffs. 10 lbs. \$2.20; 100 lbs. \$20.00.

GOLDEN SUNSHINE (75 days) Produces on stalks 7 feet tall, 2 to 3 large ears with broad, very sweet and tender kernels. An excellent early, yellow-earned variety. Pkt. 10c; lb. 40c, prepaid. Unprepaid: 10 lbs. \$2.20; 100 lbs. \$20.00.

SWEET CORN VANGUARD (85 days)

Ears 10 inches long, white, enveloped in an immensely thick and heavy husk. For this reason the ears are not attacked nearly as badly by worms as is the case with other varieties. Of good quality, fairly sweet. Immensely productive, averaging 3 well developed ears to a stalk. Vanguard is one of the best paying sorts available. Pkt. 10c; lb. 40c, prepaid. Not prepaid: 10 lbs. \$2.20; 100 lbs. \$20.00.



Sweet Corn September Morn—Ears Extra Large, Quality Extra Good

SEPTEMBER MORN SWEET CORN

AN EXTREMELY LARGE, WHITE VARIETY

SEPTEMBER MORN has ears fully twelve inches long and at times they reach fourteen inches in size. They are six to seven inches in circumference and have sixteen rows of very deep kernels. It is really immense in size and combines with this an unusual feature—really high quality, being tender and extraordinarily sweet.

SEPTEMBER MORN is both a heavy yielder and has a very thick husk. This latter feature makes it very resistant to worms and there will be little if any loss from this source.

SEPTEMBER MORN matures late in August or early in September, a time when hardly any sweet corn is on the market. Here in Council Bluffs it retails for 20c to 30c the dozen ears. And it is such a ready seller; simply display a few ears with the husks partly stripped off and the corn sells itself. After one or two trips you'll find the demand well established and your whole crop will sell without further effort. Pkt. 10c; 1 lb. 40c, prepaid. Not prepaid: 10 lbs. \$2.20; 100 lbs. \$20.00. Days to picking 96.

WHIPPLE'S EARLY YELLOW (86 days)—Ears almost twice as large as those of Golden Bantam, fully as sweet and tender, three days later. Pkt. 10c; lb. 40c, prepaid. Not prepaid: 10 lbs. \$2.20.

NARROW GRAIN EVERGREEN (96 days)—Long heavy ears 18-20 rowed deep narrow grains, highest quality, few days earlier than Stowell's. 10 lbs. \$2.20; 100 lbs. \$20.00.

GOLDEN BANTAM (83 days)

Small ears, symmetrical, with yellow kernels which at first give the impression of field corn, but after tasting it, it proves to be real Sweet Corn and of exceptionally good quality. Medium-early. Pkt. 10c; lb. 40c, prepaid. 10 lbs. \$2.20; 100 lbs. \$20.00.

STOWELL'S EVERGREEN—The most popular variety of white corn. Ears $2\frac{1}{2}$ inches thick. 16-20 rowed, kernels broad deep, sweet and tender. Holds well in prime condition at eating stage. Ready in 100 days. Pkt. 10c; lb. 40c, prepaid. Not prepaid: 10 lbs. \$2.20; 100 lbs. \$20.00.

COUNTRY GENTLEMAN (98 days)—A prolific variety of excellent quality. Ears 7-8 inches long, kernels very deep, slender, sweet and tender, set irregularly "shoe peg" fashion without row formation. Pkt. 10c; lb. 40c, prepaid. Not prepaid: 10 lbs. \$2.40; 100 lbs. \$22.00.

You can order all seeds priced at 45 cents per ounce or over in quarter and half ounce lots at ounce rate. Quarter and half pounds at pound rate. Five pounds or over at 10 pound rate. 25 pounds or over at 100 pound rate.

Hybrid Sweet Corn

SWEET CORN GOLDEN HUMMER (68 days)

Ears 7 inches long, 12 rowed, kernels broad, deep with high sugar content, golden yellow. Valuable hybrid variety because it produces uniform ears, is heavily productive and extra early. Pkt. 10c; lb. 60c, prepaid. Not prepaid: In lots of 5 lbs. or over, 43c per pound; 100 lbs. \$40.00.

SWEET CORN TENDERGOLD (86 days)

Resistant to bacterial wilt (Stewart's disease). Will stand unaffected on diseased ground with diseased corn fields all around.

Ears 12-rowed, 8 inches long. Golden Bantam type. This new hybrid corn commands a premium on the market because in tenderness and succulence it has no rival. Market gardeners report customers insisting on this corn after one trial. Try it. Pkt. 10c; lb. 60c, prepaid. Not prepaid: 10 lbs. \$4.30; 100 lbs. \$40.00.

SWEET CORN GOLDEN CROSS (88 days)

GOLDEN CROSS BANTAM—Created by crossing two Hybrid Sweet Corn varieties of the Bantam type. Stalks 7 feet tall, ears of golden yellow color 8 inches long with 10 to 14 rows of kernels. Ready for the market 88 days from date of planting, in other words about 8 days later than the regular Golden Bantam. Yields from 50 to 65% more than any stock of Golden Bantam. Quality the very best, the kernels are large, sweet and tender. Prepaid: Pkt. 10c; lb. 60c. Not prepaid: 10 lbs. \$4.30; 100 lbs. \$40.00.

EARLIGOLD HYBRID (72 days)

Ears golden yellow 12-16 rowed 6½ to 7 inches long slightly tapering with well filled kernels of marked uniformity. Plants sturdy 5-6 ft. tall with few suckers. Quite wilt resistant. In wilt-free sections the yield of marketable ears is 10 to 30% greater. In wilt infested areas 10 to 60% greater than Sunshine and Golden Early Market. Pkt. 10c; lb. 60c, prepaid. Not prepaid: 10 lbs. \$4.30; 100 lbs. \$40.00.

NARROW GRAIN HYBRID (96 days)—(Narrow Grain Evergreen)—The ear is as large as the Stowell's Evergreen and averages 20 to 24 rows to the ear. Kernels very long, longer than in any known variety, tender and sweet in straight rows. One of the best white varieties. Pkt. 10c; lb. 60c, prepaid. Not prepaid: 10 lbs. \$4.30; 100 lbs. \$40.00.

TWELVE ROW BLEND (82 days)

A blend of three twelve rowed, yellow colored, hybrid varieties. The advantage of planting this blended seed is that you will get a heavy crop of high quality ears of uniform length, averaging 8-9 inches, over a period of at least ten days.

IOANA HYBRID (87 days)

An attractive and productive variety, highly resistant to drought and wilt. Plants tall and sturdy with broad and numerous leaves. Ears 8 inches long, 12-14 rowed, cylindrical, well filled with medium narrow, light yellow kernels. Our strain of Ioana is distinctive and exceptionally productive. Pkt. 10c; lb. 60c, prepaid. Not prepaid: 10 lbs. \$4.30; 100 lbs. \$40.00.

Pop Corn

Culture—Wherever field corn grows, pop corn, will. Can be planted like field corn 4 plants to each hill or drilled in rows 3½ feet apart and 10 inches apart in the rows. Four pounds of seed plants an acre. To make money raise pop corn every year, sell direct to the stores and establish a steady trade. Even when sold to jobbers or to elevator men there is good money in it and like with everything else there are years when the price is very low for pop corn and again when the prices are high and the profits satisfying.

SOUTH AMERICAN POP CORN—Same as T. N. T. This yellow corn produces heavy ears, it pops exceptionally large, the popped corn has a creamy yellow cast, making it appear as though it was buttered. Pkt. 10c; lb. 35c, prepaid. Not prepaid: 10 lbs. \$1.80.

JAPANESE HULLESS—This is the tenderest Pop Corn known. It pops without a hard kernel. Pkt. 10c; lb. 35c, prepaid. Not prepaid: 10 lbs. \$1.80.

SUCKERING SWEET CORN is of no benefit at no time under any conditions. It is a harmful practice reducing the crop of ears 25% or more as has been demonstrated in thorough experiments by the Conn. Agr. Exp. Station and by others.

Kale or Borecole

CULTURE—Half ounce of seed will sow a row 100 feet; 1 lb. to the acre. In the South where this vegetable is very popular, sowing is usually done from August 15th to October 15th. In the North sow early in the spring and again in the early part of August. Have the rows 18 inches apart and 12 inches apart in the rows. Days: From planting to edible stage.



KALE EVERGREEN GEM (50 days)

Of all Kales, Evergreen Gem is the best and most profitable variety. When fully developed (50 days from date of sowing) the plants stand 18 to 24 inches high, of very dense growth, very spreading and rest directly on the ground. Being so to say anchored to the ground are not affected by high winds. The leaves are as heavily curled as the best strains of curled parsley, very attractive in appearance of distinct, intense, deep green color with a bluish sheen. The leaves never turn yellow even after being exposed to several frosts. Markedly different from other Kales as it branches out of the bud instead of from the stalk, producing many more leaves than the old varieties and is unsurpassed in yielding qualities, 500 barrels per acre being the average crop. The leaves being very densely curled have high carrying qualities for long distance shipping. Try this Kale. We assure you that you will find it the finest and by far the most profitable variety. For best results plant in rows 30 in. apart, 8 to 10 in. apart in the rows, thinning out when the plants are 4 to 5 inches tall. Pkt. 10c; oz. 20c; lb. \$2.20, prepaid.

BLUE SIBERIAN KALE (65 days)

Virginia variety. Special market garden strain of vigorous growth and exceptionally attractive bluish-green color. Beautifully curled and crumpled at the edges. Withstands severe winter conditions. Pkt. 10c; oz. 20c; lb. \$2.00, prepaid.

DWARF BLUE CURLED SCOTCH (50 days)—Also known as Bloomsdale Kale or Jamaica Kale. Plants dwarf and compact, foliage fine curled, deep green. Select stock. Pkt. 10c; oz. 20c; lb. \$2.20; 10 lbs. \$20.00, prepaid.

HANOVER KALE (30 days)

Smooth leaved type of kale of vigorous growth, furnishing quantities of fine flavored, sweet tasting tender leaves superb as salad or stewed, boiled, etc. Of very rapid growth ready to cut in 3 to 4 weeks from date of sowing. Pkt. 10c; oz. 20c; lb. \$2.00.

Dill An annual plant about 3 feet high, strongly aromatic, used for flavoring pickles, sauces. The seed is used by some for flavoring sauerkraut. Sow early in April in rows 12 to 15 in. apart and again in June to have fresh dill late in summer and fall. Dill can be used also in dry state. As a rule is a paying crop. Pkt. 10c; oz. 15c; lb. \$1.20.

How to Make Dill Pickles

Freshly gathered perfectly formed and sound, carefully washed cukes are placed in jars or barrels in layers with layers of dill either fresh or dried and the jars filled with brine. For quick consumption make the brine by adding pint of vinegar and 4 ozs. of salt to each gallon of water; if you wish the pickles to keep for a longer time, use twice as much vinegar and salt. Place a board with a weight on the top of the cukes, to keep them submerged. In warm weather the pickles will be ready in 8-10 days, in cool weather it takes as long as 4 weeks.

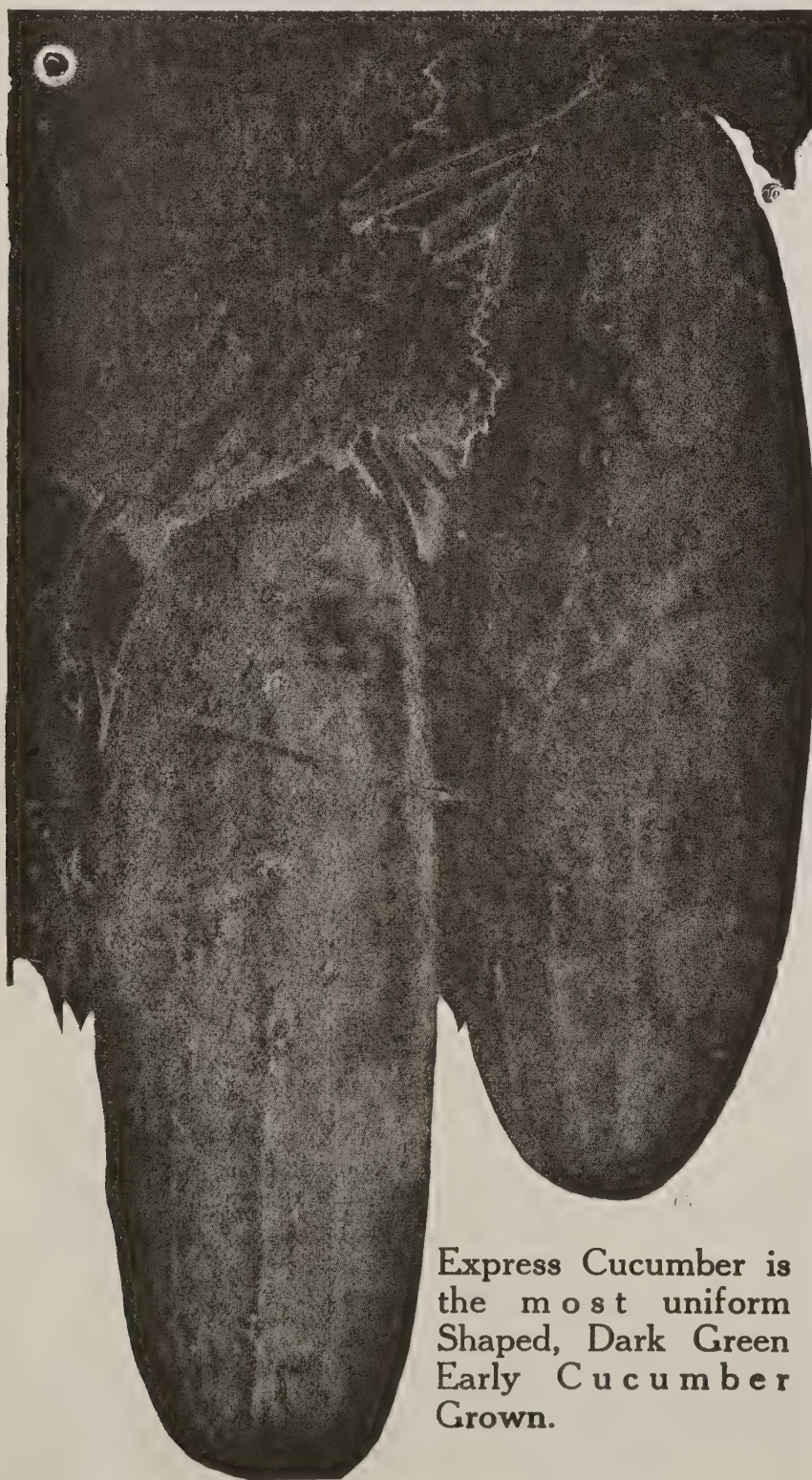
AN IMMENSE CROP of pickling cucumbers will you get by cutting off the tips of vines and keeping them cut to the length of 4 ft. At ALL times pick your vines CLEAN. If the market price is not below the cost of production, sell, otherwise feed your cukes to pigs. Vines picked clean will keep on bearing. Should the price be what it should be, you will have cukes to sell. Make 3 to 4 successive plantings. If your first planting goes haywire, there are 3 more plantings to fall back upon. As they say, there is more than one way to skin the cat. Every way has to be used nowadays if one does not want to go crazy trying to figure out how to meet the taxes.

Cucumber

For an early crop plant in hot beds on pieces of sod 6x6 inches and three inches thick. Plant 8 seeds in the center of each piece and when true leaves appear and danger of frost is over move plants to the field, put them in rows 5 feet apart and 3 feet apart in the row. Most gardeners plant the seed in open ground about May 10th, dropping 10 to 15 seeds in each hill in rows 5 feet apart and 3 feet in the row. When the plants get their true leaves thin out to three in each hill. Give frequent but shallow cultivation and if the crop is attacked by beetles give light application of air slacked lime mixed with soot and road dust. 1 oz. to 50 hills, 2 lbs. per acre. In our locality cucumbers can be planted up to July 10th. The extra early sorts up to July 20th.

CULTURE UNDER GLASS—Most crops under glass are started from early January up to April. Planted in the fall, they are coming rather slow unless the weather is exceptionally bright. Solid beds give best results, benches 6 to 8 inches deep filled with rotted sod mixed with about one-fourth cow manure give good results also. The temperature should never be allowed to go under 65 degrees at night and for pollenizing bees are needed. If bees do not come from outside, place a bee hive inside. Water only when needed then give a thorough soaking, prevent cold drafts, fumigate with tobacco LIGHTLY as a heavy dose would scorch the foliage and if mildew appears use sulphur promptly. Mulch with manure and apply it in liquid form when the vines are showing healthy growth.

CONSULT the front pages of this catalog. You will find many important novelties listed on those pages.



Express Cucumber is the most uniform Shaped, Dark Green Early Cucumber Grown.

Which Is The Best Cucumber?

The best slicing Cucumber is at present LINDEN'S MARVEL. It is hardy, withstands drought and the ravages of lice better than most cucumbers, is extraordinarily productive and the cucumbers are real beauties. Both for the home or market it is a very valuable variety, also high class for forcing.

EXTRA EARLY EXPRESS is a much earlier variety, in fact one of the earliest of all cucumbers, and for market invaluable, because it yields an immense crop of dark green rather short fruit and is suitable both for slicing as well as for pickling.

GOLDEN HARVEST is still earlier than Early Fortune and some growers regard it a better paying sort, for an early crop, than Express; others, however, favor Express. Which of the two is better depends to a large extent on the requirements of the market one caters to and the growers themselves must decide this question. Try both and remember that Express and Early Harvest are of value chiefly for an early crop or for a heavy crop of pickles.

JUMBO is an extra fancy sort with long and most beautiful fruit which sells in the market for more than double of other Cucumbers. It is nearly seedless. If you want to raise only one variety choose EXPRESS.

CUCUMBER TRIUMPH because of just right size, length, earliness, beautiful dark green color and because heavily productive, will displace most other varieties. **EARLY RUSSIAN** cucumber produces a crop so early that when dry and hot weather arrives, the crop is totally out of danger.

PICKLING CUCUMBERS—Express, Early Fortune, Golden Harvest and Taxpayer outyield regular type of pickling cucumbers such as Chicago or Jersey Pickling. But they are not wanted by pickle factories which demand regular three celled pickling kinds and of which National Pickle is the best because it is a vigorous growing variety, yields heavy and the fruit is symmetrical, dark green solid, meaning not hollow inside.

EARLY FORTUNE is one of the most popular because very heavily productive and high class for both pickling and slicing. Our strain of Early Fortune yields a high percentage of "FANCY" fruit and picks over a long season.

Cucumbers require very rich soil for very best results although surprising crops are produced with but little care. A gardener friend of ours recommends fertilizing the surrounding area, to be covered with the vines as well as the hill proper. And he says to cultivate exceedingly shallow. As he has had unusual success in his line, we are passing you this "tip." The government has issued a bulletin, No. 254 Cucumber, and No. 1320, The Production of Cucumbers in Greenhouses; also No. 1563, CUCUMBER GROWING, in which every phase of the industry is discussed, which may be had without cost by writing the Secretary of Agriculture, Washington, D. C.

EXTRA EARLY EXPRESS CUCUMBER

EXCEPTIONALLY EARLY DARK GREEN (58 days)

The most beautiful and the best shipper of all White Spines. It grows from 8 to 10 inches long. It is truly an evergreen, retaining its glossy green color until fully ripe. Bearing small fruit for pickling in 40 days from germination, and large fruit for slicing can be pulled in 45 days. Vine is a strong grower, foliage broad leaved, deep green, close jointed, does not sunburn. Blooms very early at every joint, consequently very prolific. The fruits are very symmetrical and straight and of rich dark glossy green throughout the entire length of the fruit. Our extra Early Express Cucumber is a great profit producer and the Southern Truckers who are shipping to the Northern markets will find this variety as one of the best. Price: Pkt. 10c; oz. 20c; lb. \$2.20. 5 lbs. or over ———?—

CUCUMBER COLORADO (60 days)

New. Of truly wonderful qualities and as near perfection that the originator calls it "the ultimate in a cucumber." Fruit 9 in. or more in length, slim, only 2 1/4 in. in diameter, very straight, very dark green, full at the ends and stays green longer than most sorts. Heavily productive and extra early. At present it is the finest slicing cucumber in existence but is not adapted for pickling as the fruit is too slender when young. Pkt. 10c; oz. 20c; lb. \$2.80.

CUCUMBER EARLY FORTUNE (58 days)

Reselected stock producing heavy crops of uniform fruit. Early Fortune is one of the best cucumbers for shipping. It will hold its intense dark green color better and remain in prime condition longer than almost any other cucumber. The fruit is 9 1/2 inches long, 2 1/4 inches through, tapering at both ends, skin smooth. Pkt. 10c; oz. 20c; lb. \$2.20.

KIRBEY'S STAY GREEN (52 days)

A small, early shipping cucumber notable for its intensely dark green color. An enormous yielder. Recommended chiefly for the earliest shipping sections, where length is not a necessity. Unexcelled in earliness, color and heavy yielding. Average size 6 1/2 x 2 1/4 inches. Pkt. 10c; oz. 20c; lb. \$2.20.

IMPROVED LONG GREEN (62 days)—Popular for slicing and for big yellow pickles. Size 13x3 1/2 inches. Pkt. 10c; oz. 20c; lb. \$3.00.

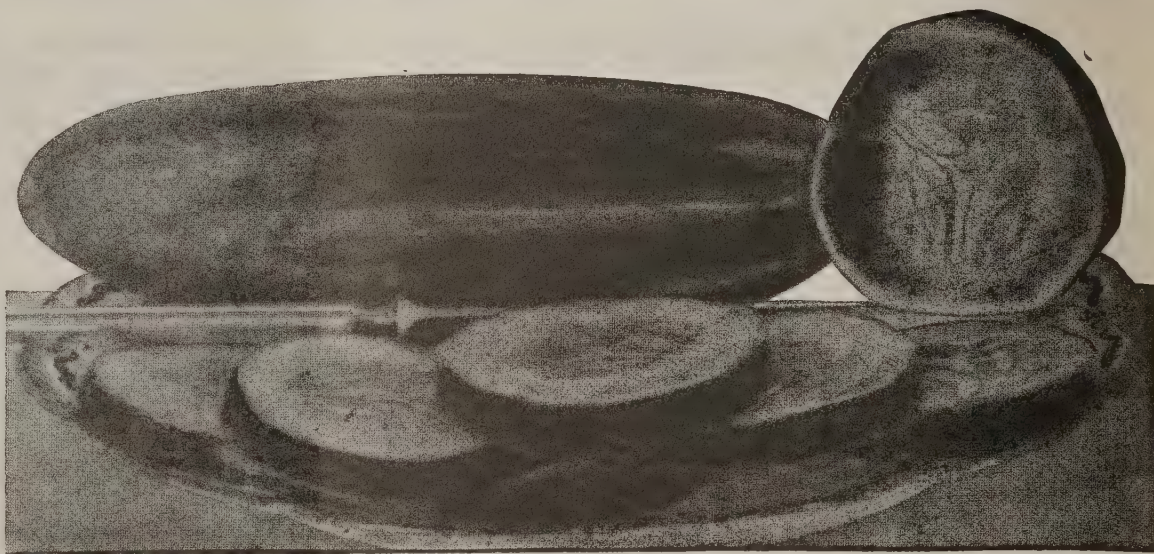
Our Cucumber Seed is way above the average in quality.

TO SAVE MONEY

Whenever you are in the market for large quantities of vegetable or flower seeds write us for special quotations — we will quote you prices ON BIG LOTS that will be hard to beat.

MICE, SQUIRRELS, crows, etc., will not get your melon or cucumber seeds, if you will dip the seed in coal oil (kerosene) just before planting.

LICE ON VINE CROPS (Aphis). An excellent bulletin giving information on how to get rid of aphids and other "bugs" was issued and will be sent free to you if you'll write to: Iowa Agricultural Experiment Station, Ames, Ia. Ask for circular No. 90. Insect Enemies of Melons and Cucumbers in Iowa.



Cucumber Golden Harvest

CUCUMBER GOLDEN HARVEST (52 days)

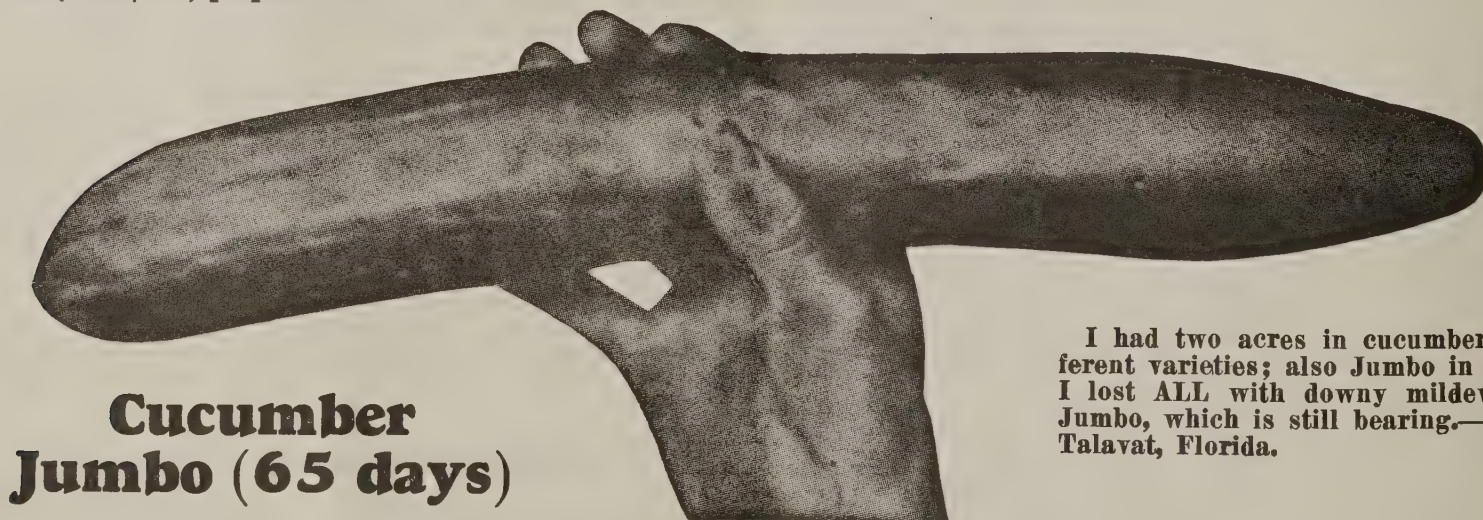
First in Earliness—Rich Dark Green—Ideal for Market and Shipping

Golden Harvest is the earliest and most profitable dark green cucumber in the world. It is 6 to 8 days earlier than Early Fortune. Golden Harvest is an enormous producer and at all stages of its growth a model in shape, very handsome and attractive.

In color Golden Harvest is an intensely deep green. This inviting color is retained during a much longer period of growth than any other variety, the fact is, that Golden Harvest will not turn its color until it is almost dead ripe.

In shape Golden Harvest is so uniform and so much one like the other that in selecting fruits for our stock seed it is difficult to decide which is the best and most perfect.

In size Golden Harvest is only slightly smaller than Early Fortune, to be exact, the size is eight inches long and two and a quarter inches through. Of ample size to satisfy anybody. Being ready at a time when other varieties are just starting to bloom or in first stages of formation, it sells at fancy prices and will show the grower much better profit than the longest and fanciest varieties that ripen late and are brought to the market when everybody has cucumbers for sale. By planting Golden Harvest you will have the market all by yourself, no competition to meet for some 6 to 8 days at least. Golden Harvest is of the highest quality of delicate flavor, fine grained, solid compact flesh, exceedingly crisp and brittle, ideal for slicing. As a shipper Golden Harvest stands very high. Excepting length it has all the qualities desired—extreme earliness, splendid color and the quality of holding its crispness long after it has been picked off the vine. Pkt. 10c; oz. 20c; lb. \$3.00, prepaid.



Cucumber Jumbo (65 days)

I had two acres in cucumbers, 8 different varieties; also Jumbo in between. I lost ALL with downy mildew except Jumbo, which is still bearing.—N. A. B., Talavat, Florida.

A VIGOROUS DISEASE RESISTANT GROWER—IMMENSELY PRODUCTIVE

By the introduction of this cucumber, we are placing on the market a variety of exceptional merit, and one which will meet with the heartiest reception by all market gardeners as well as private planters.

JUMBO CUCUMBER differs from all other cucumbers in many respects.

FIRST—It has very handsome, smooth, long and slim fruits. The skin is of a dark green color, nearly black, and with only few spines that are hardly noticeable. It is very symmetrical, 18 inches long, and never more than three inches in diameter, except when fully ripe. It is faintly striped. The illustration gives a correct idea of its shape.

Second—It is a very vigorous grower with vines twice as long and leaves twice as large which stand twice as high as of other varieties.

THIRD—Jumbo Cucumber is enormously productive. The strong vines are heavy bearers and those growing Jumbo Cucumbers will certainly be elated, when looking over their patch of beautiful long slim fruits.

FOURTH—Jumbo Cucumber is the finest eating cucumber on earth. It has few seeds and the seeds are only half the size of other slicing varieties. The flesh is so tender and brittle that a slice of this cucumber taken on the end of a fork will break in two with only a slight jerk. We are certainly fortunate and glad to be able to offer a cucumber so extraordinarily good, and assure you that you never had as fine a cucumber as our Jumbo in your garden. Because the fruit of Jumbo is long and slim even in the first stages of development it is not suitable as a pickling cucumber. Pkt. 10c; oz. 45c.

CUCUMBER LONGFELLOW (74 days)

Long, slender, dark green, desirable for greenhouse or out door culture. Ideal for market or as a "straight pack" variety for shipment. Size 12-15 in. long and 2½ in. in diameter. Fairly early and moderately productive. Pkt. 10c; oz. 20c; lb. \$3.00, prepaid.

A & C CUCUMBER (68 days)

One of the finest of the slicing types. Fruit 10 inches long, 2¼ in. through, tapering at both ends, containing but few seeds. Fairly prolific. Its outstanding quality is the intense deep green color. Pkt. 10c; oz. 20c; lb. \$2.80.



Endive Deep Heart Fringed

CUCUMBERS (Continued)

BLACK DIAMOND (53 days)—Similar to Early Fortune but slightly shorter and earlier. Size 9x3 inches. Pkt. 5c; oz. 20c; lb. \$3.00.

DAVIS PERFECT (58 days)—Long smooth dark green cucumber with tapering ends of excellent eating qualities. Size 12x3 inches. Pkt. 5c; oz. 20c; lb. \$3.00.

DELTUS (65 days)—Of uniform shape with rounded ends and a deep green color, desirable for greenhouse culture. Size 12x3 inches. Pkt. 10c; oz. 20c; lb. \$3.00.

EARLY RUSSIAN (50 days)—Fruit small of little use except for small uniform pickles in districts where the long fruited sorts will not ripen. Size 4x2 inches. Pkt. 5c; oz. 20c; lb. \$3.00.

STRAIGHT 8 (58 days)—Long, slender, very straight fruit of intense dark green. Size 9½x2¾ inches. Pkt. 5c; oz. 20c; lb. \$3.00.

WOODRUFF'S HYBRID OR CLARK'S SPECIAL (62 days)—A high class slicing main crop variety holding its deep green color for a long time. Size 11x13 inches. Pkt. 5c; oz. 20c; lb. 2.80, prepaid.

CUCUMBER NATIONAL PICKLE (55 days)

Also called Packer's, Heinz's and Monarch Pickle.

Robust in growth, bearing extra heavy crop of well-shaped fruit that shows up well finished when pickled; firm, not hollow inside and fresh green in color. Pkt. 5c; oz. 15c; ¼ lb. 60c; lb. \$2.40, prepaid.

CHICAGO PICKLE (58 days)—Deep green fruit of medium length, slightly pointed at both ends, with prominent black spines. True stock. Pkt. 5c; oz. 20c; lb. \$2.80, prepaid.

SNOW'S FANCY PICKLE (56 days)—A very fine strain of Chicago Pickle. The fruit is a little smaller than Chicago Pickle and is used for fancy pickles. Pkt. 5c; oz. 20c; lb. \$2.80, prepaid.

WEST INDIA GHERKIN (50 days)—A distinct sort with rough, prickly fruit. Is used for pickles only. Pkt. 10c; oz. 20c; 1 lb. \$2.00, prepaid.

IMPROVED JERSEY PICKLE (56 days)—Fruit short, rather light colored, skin thin. Quality very good. Very heavily productive. Pkt. 5c; oz. 20c; lb. \$2.80, prepaid.

BATAVIAN FULL HEART ENDIVE (90 days)

Improved Batavian. A superior strain. Larger heads, leaves broad, thick and tender, the heart well filled out and fairly well blanched even without tying. Of pleasant flavor, loaded with health promoting salts and vitamins. Pkt. 5c; oz. 15c; lb. \$1.40.

We sell half and quarter pounds at pound rate, 5 pounds or over at 10 pound rate, 25 pounds or over at 100 pound rate.

Endive or Escarole

The high quality of our Endive seed is well known among the large producers of this vegetable. The crop is rogued severely every year and our strains are uniform and true to type. The most largely planted Endive is the Green Curled. The bulk of the crop is consumed in the big Northern cities. The smooth leaved sorts are popular with the foreign part of the population. Curled Head is a fancy sort quite distinct in appearance. The new Fringed Deep Heart we believe will in time become the leading variety.

CULTURE—Half ounce to 100 feet of row, 5 lbs. per acre.

For an early crop sow in the later part of April in rows 20 inches apart, and thin to 12 inches apart in the row. When the outer leaves have reached the length of 6 inches the crop is ready for blanching. Select a sunny day for this work, bring the outer leaves together over the top of the plant, tie closely together to prevent rains from coming through. About two weeks afterwards the plants will be blanched and ready for use. Endive is not particular as to the soil but it must be kept free from weeds until plants attain their full size for blanching purposes. For a late crop sow about August 10. Number of days: From sowing to cutting stage.

ENDIVE DEEP HEART FRINGED

New. In type between Full Heart Batavian and Green Curled. Of upright growth and leaves exceptionally broad with leaf margins deeply cut and curled. The plants do not lie flat on the ground lessening the chances of bottom rot. Heart well filled closely packed with an abundance of fine leaves blanched to clear creamy yellow, highly attractive. Well grown plants have a diameter of 10 to 12 inches and a depth of 7 to 8 inches. Pkt. 10c; oz. 15c; lb. \$1.60.

ENDIVE CURLY HEAD (92 days)

The most valuable curled green Endive for market growers. Quite early, of large size, very deep-hearted, white ribbed. It is a self-blanching variety and does not need tying for blanching purposes. Highly attractive in appearance. Can be planted close, plants being of very compact growth. Positively the best sort where the market demands curled type of Endive. Pkt. 10c; oz. 20c; lb. \$1.80; 10 lbs. \$18.00, prepaid.

ITALIAN RED RIB ENDIVE (95 days)

Also called Pancaller, is a large curled variety with green leaves and a faint pink stripe on the outside of the base leaves. Pkt. 5c; oz. 15c; lb. \$1.30, prepaid.

GREEN CURLED ENDIVE (95 days)

Standard variety, producing beautifully curled leaves, crisp, tender and blanches cream white. Pkt. 5c; oz. 15c; 1 lb. \$1.30.

FRENCH ENDIVE—Same as Witloof Chicory, see page 32.



New York Egg Plant

Egg Plant

CULTURE—1 ounce will produce 3,000 plants; 6 oz. to the acre. About March 20th sow the seed in flats filled with 4 inches of dirt, place the flats close together in frames filled with fresh manure over which is spread a layer of dirt 1 inch thick. This dirt is placed there to absorb the steam and ammonia escaping from the hot manure. As soon as the seedlings appear move them into a spent hot bed and there grow them on. When true leaves appear set out the plants in rows of 6 inches apart and 4 inches apart in the rows. If you will plant them closer together your plants will not be stocky and healthy. This method of sowing egg plants in flats instead of direct in the hot bed, minimizes the danger from ammonia. Unless conditions are favorable plants raised direct in the hot bed become hard and wiry in the stem. This is caused by ammonia escaping from the manure and plants thus affected sooner or later turn yellow and sick and instead of producing saleable fruit, the field is filled with dying plants. Many other plants are affected in the same way especially asters. In the field Egg Plant should be placed in rows 3 feet apart and 2 feet apart in the rows. In our locality we plant into the field about May 25th.

Which Egg Plant Is the Best?

There are quite a number of varieties of Egg Plants differing in shape of fruits as well as in color. In this country the black colored varieties are the only ones that are popular. We think that **BLACK BEAUTY** is the best variety. In order to get fine shaped and extra large fruits of Egg Plant a certain number only should be allowed to remain on each plant. Pinch the flowers towards the end of the summer and you will be rewarded with Egg Plants of immense size and splendid quality and flavor.

IMPROVED NEW YORK SPINELESS (83 days)

Produces large, handsome, satiny smooth fruit of deep purple color. The plants are of low, stocky branching habit and quite productive, a single plant bearing usually from 8 to 10 large and perfectly shaped fruits. Finest Northern grown seed. Pkt. 10c; oz. 40c; 1 lb. \$4.00; 10 lbs. \$35.00, prepaid.

EGG PLANT FLORIDA HIGH BUSH (85 days)

A variety that produces pear shaped, black-purple colored fruits on strong bushes and as a rule high above the ground so that there is no waste. The bushes grow taller than is the rule, are upright and stiff, the fruit medium in size. A very productive variety. Pkt. 10c; oz. 40c; ¼ lb. 88c; lb. \$3.50; 10 lbs. \$30.00, prepaid.

BLACK BEAUTY EGG PLANT (80 days)

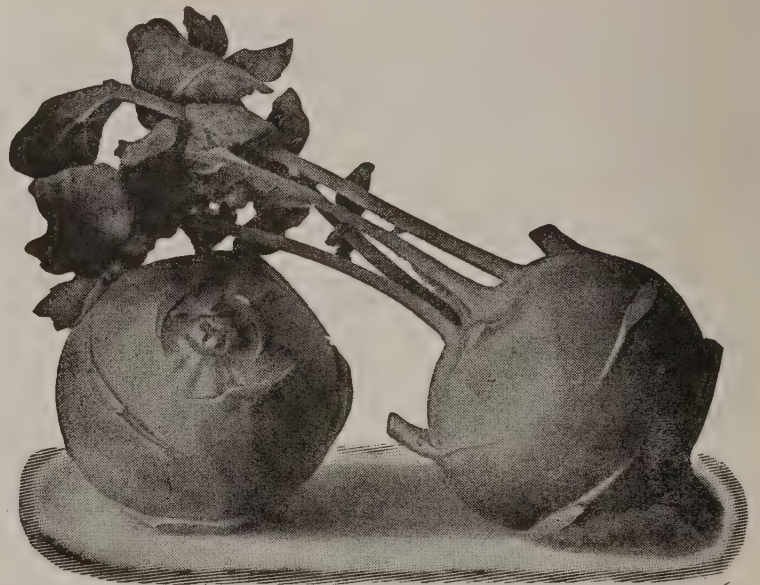
Two weeks earlier than New York Spineless, with broad and thick fruit of lustrous purplish black color. Coming two weeks earlier, they readily bring double prices. Pkt. 10c; ½ oz. 20c; 1 oz. 40c; 1 lb. \$4.00; 10 lbs. \$35.00, prepaid.

• EARLY LONG PURPLE (78 days)

Extra early, fruit shaped like a cucumber, about a foot long and 3 to 4 inches through. Skin dark violet. Heavy cropper. Pkt. 10c; oz. 40c; lb. \$3.50.

ASPARAGUS CHICORY—RADICHETTA

Known also as Italian Chicory or Ciccoria Catalogna. A distinct variety which instead of forming into a rosette grows in erect, strong, meaty, thickly set shoots. Makes very delicate salad or boiled is served like asparagus. Of vigorous growth, may be cut several times in season as new shoots appear after each cutting. Pkt. 10c; oz. 30c; lb. \$2.00.



Kohlrabi Prague Model

Kohlrabi

Crisp, tender, savory Kohlrabi is a real delicacy. It is a dish that you'll always remember. One doesn't need to be fond of vegetables to like Kohlrabi. Boiled and served in cream or butter is by far the most common.

For the market grower the important thing to know is what variety to grow to meet the tastes of his customers. If the customers are Southerners (French, Italian, Spanish) grow the Vienna varieties. The Southern people prize in Kohlrabi both the bulbs as well as foliage. Vienna Kohlrabi has plenty of foliage. The Northern people (Germans, Scandinavians, etc.) demand tender and juicy bulb and care nothing about the leaves. For them Triumph of Prague is the variety.

CULTURE—Sow the seed as early as you do early cabbage. transplanting to stand 6 inches apart in the row, keep on sowing till July 15th if located North and till August 15th if located South.

KOHLRABI PRAGUE SPECIAL (44 days)

White Kohlrabi, the very finest and best both from the standpoint of table qualities as well as for growing for the market. It is four days earlier than Triumph of Prague which means the earliest of all and has plenty of top to make it a fine sort for bunching. Both the bulb as well as leaves extraordinarily tender and high flavored. Pkt. 10c; oz. 60c; lb. \$7.00.

KOHLRABI TRIUMPH OF PRAGUE (50 days)

New. Produces beautiful, uniform, perfectly shaped, greenish-white bulbs, tender and juicy with very few leaves. Extra early. Pkt. 10c; oz. 60c.

PURPLE VIENNA KOHLRABI (60 days)

Of same usefulness as the White Vienna, but having purple skin. Very tender.

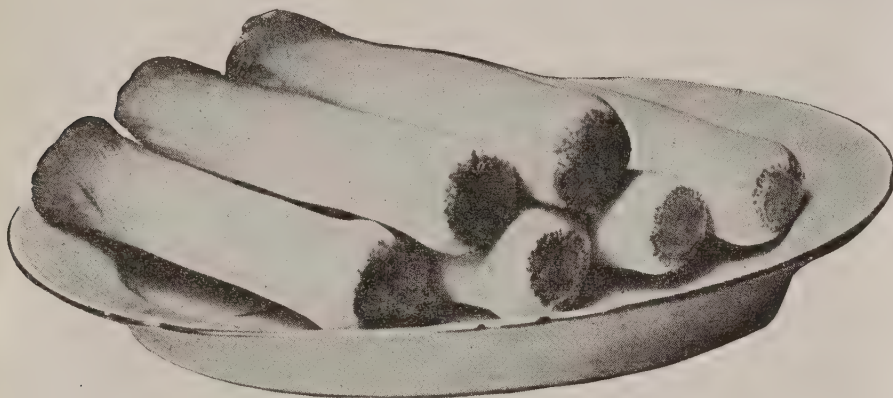
WHITE VIENNA KOHLRABI (60 days) An excellent
old variety, very early, white and tender. Choicest seed of true stock. Pkt. 10c; oz. 60c; lb. \$7.00.

Chicory

CULTURE—1 oz. for 3,000 plants; 4 lbs. for 1 acre.

Sow the seed of Witloof late in spring (May-June), in rows 15 inches apart and thin out to 4 inches apart in the rows. In the fall dig the roots, discard all that are less than 1¼ inch thick at the crown also roots with narrow leaves or several heads. Cut off the tops about an inch from the neck, shorten the ends of roots to a length of 8 inches and store in cool, until wanted for forcing. Force under greenhouse benches at a temperature of 50-55 degrees. Set the roots close in the trenches, tops just below the surface, pack the soil firmly around the roots and water. On top of the trenches place 8 inches of moist soil. The heads well blanched will be ready in about 30 days. The roots can be forced also in the cellar. If temperature is right.

WITLOOF CHICORY A paying crop easily disposed of. The first class hotels being the buyers. The part used are tender shoots served as salad. A real delicacy. Pkt. 10c; oz. 45c.



Italian Winter Leek

Leek

CULTURE—1 oz. to 100 feet of row.

LEEK is a refined green onion in taste, milder, sweeter, yet possessing the same health-promoting qualities of the onion. Great appetizer, as palatable as crisp, juicy radishes.

Sow in the spring as soon as the ground can be worked, in rows 1 foot apart; cover the seed 1 inch deep and when the plants are about 6 inches high thin out to 3 inches in the row. When cultivating draw the soil well about the plants in order to blanch them.

WHICH VARIETY OF LEEK IS THE BEST?

Leek is a fine vegetable but very much neglected and grown only by a limited number of people. It merits wide popularity. It is fine for soups, has an agreeable onion-like flavor and once you try it you will grow it steadily.

ITALIAN WINTER is without doubt the best variety. Try it this year and we assure you that you will be delighted with the results; you will grow Leeks twice the size of ordinary Leeks and of the finest flavor.

ITALIAN WINTER LEEK

The best of all Leeks. Extremely hardy and of enormous size, the stalks are tender up to a height of 15 inches. Of fine, mild flavor, and always beautifully blanched. Fine for bunching. Pkt. 15c; oz. 80c.

AMERICAN FLAG Fine for fall and winter. Of quick growth, producing long stems of uniform shape and size. Pkt. 10c; oz. 80c.

Sicilian Fennel

Superior to the old Florence Fennel, large and heavier. Of quick growth and easy to raise. Sow early for a Spring crop and late in summer for a fall crop. Sicilian Fennel has very fleshy stalks which are served either raw or boiled. Pkt. 10c; oz. 15c; lb. \$1.40.

ABOUT VARIETIES OF LETTUCE

There are four main types of Lettuce. The crisp, cabbage-heading, of which New York is the best type. Then comes the Butter variety. To this class belong varieties that form firm, large heads, not quite as hard as those of New York, possessing quality in the highest degree. Buttery, leaves soft, of much substance. Hot Weather and California Cream Butter are in this class. This quality lettuce should be most largely grown. It is not, most markets demand the big hard heads of New York. Butter head lettuces are demanded by particular buyers. These being in the minority, the gardener must grow the rather coarse New York and if he is enterprising, he will also grow Romaine lettuce. Romaine or Cos lettuce makes large heads, oblong in shape, will head under adverse conditions and is a lettuce very high in quality, sweet and crisp. By many, Cos lettuce is regarded as the best of all. The fourth type of lettuce is Leaf lettuce of which the best example is Grand Rapids. Leaf lettuce does not possess the high quality of the above named types but it is easily raised, will stand much neglect and lots of adverse weather. When well grown the heads are all that can be desired in appearance and almost in quality. Note that we say "when well grown."

Well grown Grand Rapids is all we say it is, if it is grown under glass and not allowed to suffer for moisture and air and if the plants are allowed enough space to develop. Under such conditions, you will get from our seed big and heavy heads, easy to sell.

All lettuce seed we send out is grown for us in a favored climate is grown by a specialist and is the best there is.

We sell half pounds at pound rate, 5 pounds or over at 10 pound rate, 25 pounds or over at 100 pound rate.

Lettuce

CULTURE—Three lbs. of seed will plant an acre, and ounce of seed will produce 3,000 plants.

To insure success in lettuce growing, rich soil, moderate moisture at all times, plenty of sunshine and proper spacing is imperative. Start the seed and transplant outdoors early so as to escape the hot and dry summer weather. Or start the seed late in July for a fall crop and in case of an early frost protect the crop by covering with hay or muslin. Space the smaller sized varieties like May King 8 inches apart in the row, the heavier like Boston or New York 10 inches apart. If you grow lettuce without transplanting thin out to proper distance as soon as the plants appear.

Sow the seed in hot beds about January 20th and when the plants are about an inch high transplant to cold frames 3x3 inches. As soon as the soil is thawed out about 3 inches deep in the field set out the plants. Lettuce cannot be successfully grown during summer and it is of utmost importance to sow early. The home gardener should sow in the open as soon as ground is thawed out sufficiently to allow the operation real early in March. As soon as the plants appear thin out to six inches apart. When the heads begin to crowd each other cut out every other plant. Provided that your soil is very rich or that you use nitrate of soda you will get fine heads following this method of growing. Do not hesitate to sow real early as all varieties of lettuce are quite hardy with the exception of New York and the crop can go through several frosts without injury.

Days: From sowing seed to marketable stage.



Lettuce White Boston

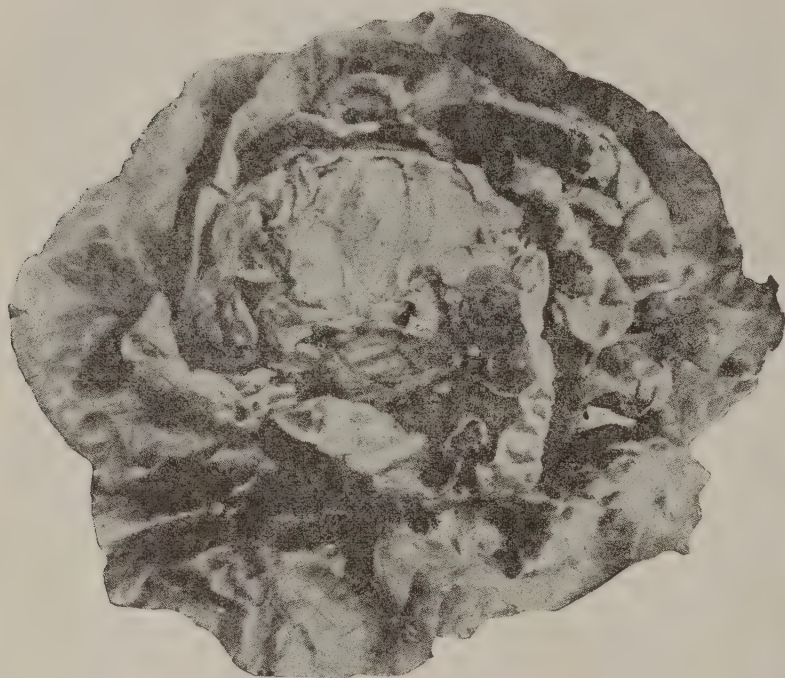
LETTUCE WHITE BOSTON (76 days)

SURE HEADING—BIG AND SOLID

A great improvement over the Big Boston in that it is lighter green in color, free from red tinge, therefore more attractive, very free from bottom rot, tip burn and that it grows higher off the ground than Big Boston. Does not scald in hot weather or turn red from cold, and produces very close to 100% of solid, large, compact, crisp and tender heads, very white inside. Originated in New Jersey and becoming the favorite with the growers upon first trial. Unbeatable for forcing as well as for spring and fall planting in the open ground. Pkt. 10c; oz. 20c; lb. \$2.00.

We sell quarter and half pounds at pound rates, 5 lbs. or over at 10 lb. rate, 25 lbs. or over at 100 lb. rate.

ABOUT HYBRID CORN—In a normal season the superiority in yield and quality of hybrid corn is not outstanding. It is though in an "off" season when the weather is hot and dry. Hybrid Corn will produce a heavy crop while "common" corn may prove an almost total failure. Hybrid Corn has an extremely heavy root system and the plants will not "roll" while the plants of common corn will. In a word, Hybrid Corn represents an advancement.



LETTUCE HOT WEATHER (63 days)

AN EXCELLENT SUMMER VARIETY—MILDEW RESISTANT

HOT WEATHER is an early variety, forming large, firm, well defined, well blanching cabbage-like heads, with broad, very thick leaves slightly crumpled, entire at margins never spotted nor brownish in any part. Of most excellent quality, sweet and very buttery in flavor.

HOT WEATHER is absolutely the best firm heading lettuce to grow through the summer months. It will not scald or burn, and will make a head where other varieties utterly fail. It somewhat resembles Salamander in character of leaf, color and size, but the head is larger, more compact, and will stand much longer before shooting to seed. In fact, it is all head, having very few outer leaves.

HOT WEATHER is extremely hardy and there is no variety that can compare with it for wintering over outdoors. It has all the good qualities that can be desired in a head of lettuce save one and that is that it is not adapted for forcing. We grew this variety at first in our trial grounds and later as a market crop in conjunction with market gardeners connected with our organization with the most satisfactory results. We earnestly ask you to try this lettuce. You will be rewarded with a fine crop and at the same time be convinced that we have the right stuff when it comes to seeds. Pkt. 10c; oz. 20c; ¼ lb. 65c; lb. \$2.60.

GRAND RAPIDS U. S. No. 1

New. Mildew resistant. Heads large and heavy, light green in color, densely fringed, leaf crisp and tender. Very uniform. Recommended for greenhouse culture. Pkt. 10c; oz. 15c; lb. \$2.00.

LETTUCE IMPERIAL No. 44 (82 days)

A sure heading, New York type, head lettuce. Will make medium, large slightly flattened, very compact heads even during hot and dry weather. Does well on muck as well as uplands and is highly disease-resistant. Of real value to all lettuce growers, absolutely dependable to produce a crop of uniform heads. Pkt. 10c; oz. 30c; lb. \$3.00.

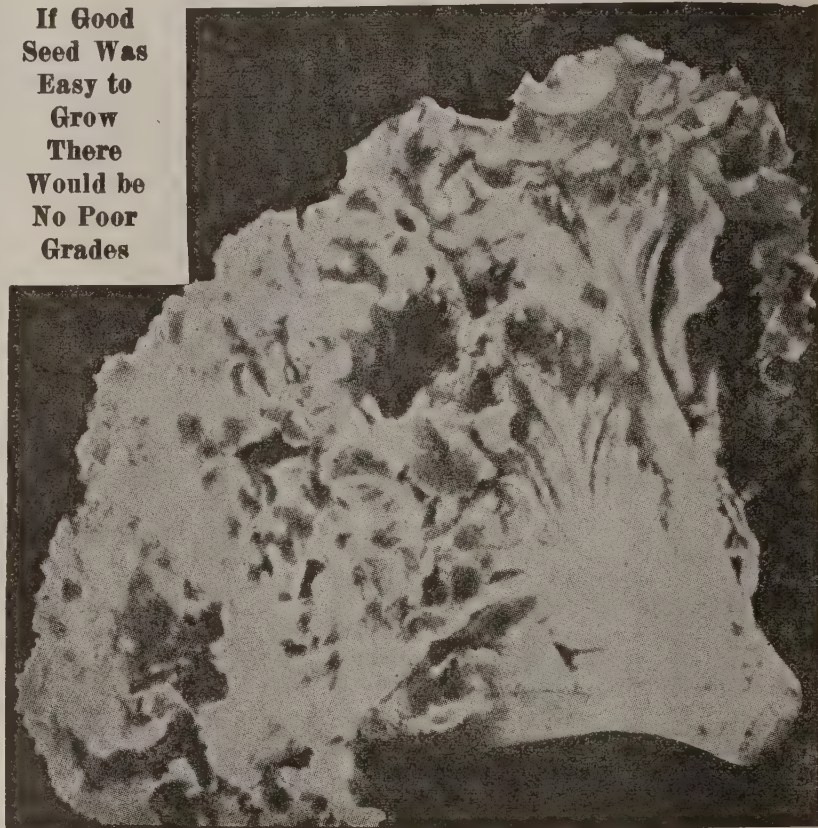
Bohemian Head Lettuce (63 days)

Very early, heads medium in size and very slow to shoot to seed. It will head when all other varieties will fail and although it sells for about half the price that Big Boston does, on account of its small size, it is profitable to raise. It is of attractive light green color, of excellent quality, mild, delicate, sweet buttery in flavor, soft in texture. Pkt. 10c; oz. 20c; 1 lb. \$2.60, prepaid.

IMPERIAL No. 847 (84 days)

Important and popular variety of New York type of head lettuce producing medium large, round, solid well formed heads. Does well in all parts of the country especially on upland soils. Stands up well in summer weather. Pkt. 10c; oz. 20c; lb. \$3.00.

If Good
Seed Was
Easy to
Grow
There
Would be
No Poor
Grades



GRAND RAPIDS SPECIAL (43 days)

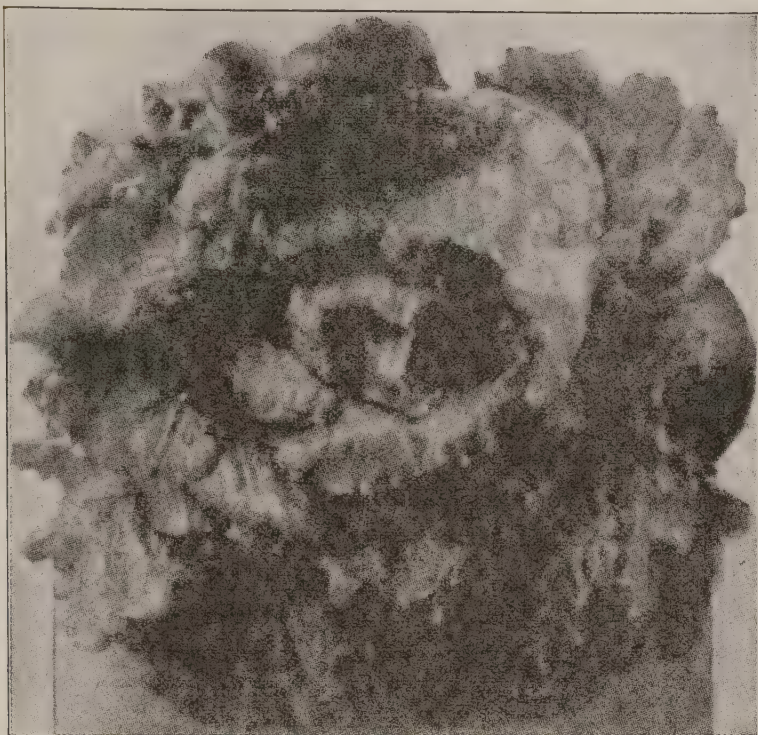
GRAND RAPIDS SPECIAL forms compact, heavy heads with thick stalks and it is the most handsome lettuce you ever saw. The heads are not only of the most beautiful appearance, but they also possess high quality. The leaves are crisp, sweet and tender and of much substance, and are in no way inferior to head lettuce.

GRAND RAPIDS SPECIAL is the best stock we have been able to secure and we tried all the important and reliable seed houses of the entire country. So said the owners of an immense greenhouse establishment located in our state. This concern uses about 80 lbs. of Grand Rapids Lettuce annually. They use our Special Grand Rapids exclusively. Pkt. 10c; oz. 15c; lb. \$2.00.



BLACK SEEDED SIMPSON (46 days)

Black Seeded Simpson is a leaf lettuce, absolutely reliable. Stands more heat, more drought and succeeds under the most unfavorable conditions, where most other lettuces would be a failure. Our seed has been saved from the largest, earliest and most perfect heads, and can be relied upon in every way. Pkt. 10c; oz. 20c; ¼ lb. 50c; 1 lb. \$2.00, prepaid.



Lettuce New York

NEW YORK OR WONDERFUL (80 days)

Produces heads of unusually large size and nearly as solid as cabbage, frequently weighing 3 to 4 pounds. Of good quality, crisp and sweet. Pkt. 10c; oz. 20c; lb. \$3.00.

LETTUCE NEW YORK No. 12 (75 days)

Sure heading strain. Earlier than the old type New York, producing fine large heads 75 days from date of sowing. Will make a fine solid heads even when sown as late as March and early in April. Sown late in summer produces a crop of fine heads in the fall. A truly wonderful variety. Will do well in well drained ground anywhere but is unsuitable for low laying muck lands. Pkt. 10c; oz. 20c; lb. \$3.00.

NEW YORK No. 515 (73 days)

An early type of New York adapted to summer and early fall production. Resistant to tip burn. Heads medium large, compact, attractive, bright green in color. A dependable header under various soil and weather conditions. Pkt. 10c; oz. 20c; lb. \$3.00.

ICEBERG (84 days) Large, late crisp, cabbage heading variety of medium green color. Quality first class. Pkt. 10c; oz. 15c; lb. \$2.00.

BIG BOSTON (76 days)—Forms big heavy heads, forces well, stands lots of cold without injury and makes a good shipping sort. Quality fair.

BIG BOSTON IMPROVED (76 days)—Large, compact, light green heads, leaves without red edge.

CALIFORNIA CREAM BUTTER (75 days)—A heading variety of excellent quality.

EARLY CURLED SIMPSON (45 days)—A bunching or leaf lettuce that will make heads under the most trying conditions. Quality fair.

HANSON OR IMPROVED HANSON (80 days)—Forms very large heads of light green color and succeeds well in all parts of the country. Stands heat quite well and is a sure header. Wholly unsuited for wintering or forcing.

MAY KING (63 days)—An early sort forming medium large compact heads of fine quality.

PRIZEHEAD (47 days)—A bunching sort of good quality, sweet in flavor, tender and crisp.

TENNIS BALL BLACK SEEDED (76 days)—Sure header, medium in size, quality very good.

UNRIVALED (76 days)—Forms large, compact, light green heads, is adapted for wintering over as well as for forcing. Quality good.

WAYAHEAD (68 days)—A head variety of very high quality. Sure header.

WHITE SEEDED SIMPSON—Same thing as Early Curled Simpson.

EARLY CURLED SILESIA (45 days)—A variety of leaf lettuce.

PRICE: All varieties of lettuce listed above except where noted. Pkt. 10c; oz. 15c; lb. \$2.00, prepaid.

**LOBJOIT'S GREEN COS (66 days)**

Strictly self-closing, extra large, compact, well blanching firm head, rounded at top. Color dark green. Quality excellent hard in texture but exceedingly crisp, sweet, firm, possessing a freshness and distinct quality not found in other lettuces. Succeeds very well in summer and grows to an immense size. In England where Cos lettuce is the favorite type, Lobjoit's Cos is the leading variety. Pkt. 10c; oz. 15c; lb. \$2.00.

PARIS WHITE COS LETTUCE (66 days)

Same as Trianon Cos (Romaine lettuce. Lattuga Romana).

Heads of immense size, often weighing six pounds each. Those who have never grown this class of lettuce should try it. Pkt. 10c; oz. 15c; 1/4 lb. 50c; 1 lb. \$2.00, postpaid.

WE CALL

Your special attention to the following items:

Cabbage Green Acre
Cabbage Early Marvel
Carrot Gold Coin
Cauliflower Snowball No. 16
Pea Welcome
Pea Giant Hamper
Pepper 16 to 1
Muskmelon Wisconsin
Lettuce New York No. 12
Radish Magdeburg
Tomato Firesteel
Pepper Early Pimento

Muskmelon

CULTURE—1 oz. of seed for 50 hills; 1 lb. for 1 acre.

Sandy soil, well enriched with manure, is the best for melons. Have the hills 4 by 5 feet, dropping 10 seeds in each hill, so as to feed mice and cutworms and still have a good stand. Leave only three strongest plants in each hill. When the plants start to vine we fertilize the field with 300 lbs. of cotton seed meal to the acre. Open shallow furrows between the rows, scatter the meal moderately thick and cultivate same in the ground. This hastens the crop to maturity. The melons are more heavily netted and almost free from culls.

In case of a cold spell with plants up early in the spring, go over the patch with a hoe and cover up the young plants with dirt and remove the dirt when danger of frost is past.

To make Muskmelon growing a paying proposition plant the seed as early as in your judgment is safe. While in the "baby" stage, the plants are liable to be badly injured if not ruined by a cold beating rain. All growers know these cold spring rains and the resulting damage. A beating rain destroys the thread-like roots of the young plants, severely checking them in growth. In many cases the plants "come out of it" but to expect an early crop of melons is out of question. To get an early crop of melons examine your plants after every rain and replant whenever you see that the plants were damaged. You cannot expect an early crop from plants that have been checked in their growth.

Starting melons in pots or berry boxes for transplanting into the field, does not work. You will NEVER get an early crop of melons that way.

Which Is the Best Muskmelon

The best and most popular is Hale's Best. The best large sized melon to grow for local markets is Golden Queen. The spiciest, sweetest and finest of ALL muskmelons is the old Rockyford. But it is a late maturing melon and in too many sections it cannot be successfully grown. **NEW MUSK-MELONS.** New muskmelons come out every year by the dozen. All these new ones are highly recommended but later it "develops" that some of the new ones were badly overpraised. We do not list all new melons preferring to "wait and see."

HOW TO TELL WHEN A MUSKMELON IS RIPE—The net on a ripe melon is hard, the net on unripe melons is soft, so that it can be easily rubbed off.

Muskmelons are rich in health-giving vitamins. Of the total solids in a ripe muskmelon about 70% are invert sugars.

Muskmelons should not be wrapped preparatory to a long distance shipment, because when wrapped they are slower in cooling and do not retain their edible qualities as long as when shipped unwrapped.

FOR LOCAL MARKET muskmelons are gathered when on a "full slip," when the melons are dead ripe and "slip" off the vines.

MUSKMELON CRANSHAW

Says one of the oldest large muskmelon growers in California: Cranshaw melon is the best thing I ever ate, simply indescribable, it is so luscious. It's salmon pink flesh is extraordinarily thick and has a sweetness and flavor that so far has never been approached by any other melon.

Cranshaw is a melon with Cassaba blood in it. It is egg-shaped with a mottled green and gold skin. No netting, it is smooth except for very slight wrinkling. The appearance of the melon as well as its high quality makes it a melon worth while growing. However we recommend Cranshaw only for sections where there is not much humidity. In parts where rainfall is heavy, Cranshaw is not the melon to grow, also it is not a first rate shipping melon. Average weight 6 pounds per melon. Pkt. 10c; oz. 20c; lb. \$2.20.

MUSKMELON GOLDEN QUEEN (83 days)

Originated with one of the melon growers in our locality who made money selling his melons when the times were not as tough as they are at present at 50c per melon never for less and many a melon went for 75c and as high as a dollar a piece for the biggest ones. In spite of his being there when it comes to charging, his customers were on the lookout for his melons. Golden Queen is a large orange fleshed melon of high quality averaging 15 pounds per fruit, heavily ribbed and heavily netted, outsells any other melon on the market and is ready for the market three days ahead of Hale's Best. This may sound like a fairy tale yet these are the facts. Not suitable for shipping. Pkt. 10c; oz. 20c; lb. \$2.20.



HALE'S BEST No. 36 (86 days)

The original H. B. lacked quality its value was earliness and appearance. Since then numerous strains were developed. The strain we offer is the BEST of all, the same as used by the growers in Imperial Valley, who are very hard to satisfy. Their using of our strain of H. B. confirms what we claim, namely that it is the best strain, possessing earliness and producing melons of large size, beautifully netted with THICK sweet flesh. Every pound of seed is hand cut, all melons not perfect are discarded. No. 36 is desirable for any purpose; roadside stand, for shipment by truck, or packing for distant markets. Flesh salmon pink, very thick, average weight per melon 3 lbs. Pkt. 10c; oz. 20c; lb. \$2.20.



BANANA MUSKMELON (94 days)

The fruit attains a length of 20 to 30 inches, and a diameter of about 4 inches. Flesh of rich orange color, deep and of exquisite flavor. Smells and looks like a gigantic banana. This is a very valuable melon and sells in choice city markets, 50 cents or more being sometimes demanded for a single specimen.

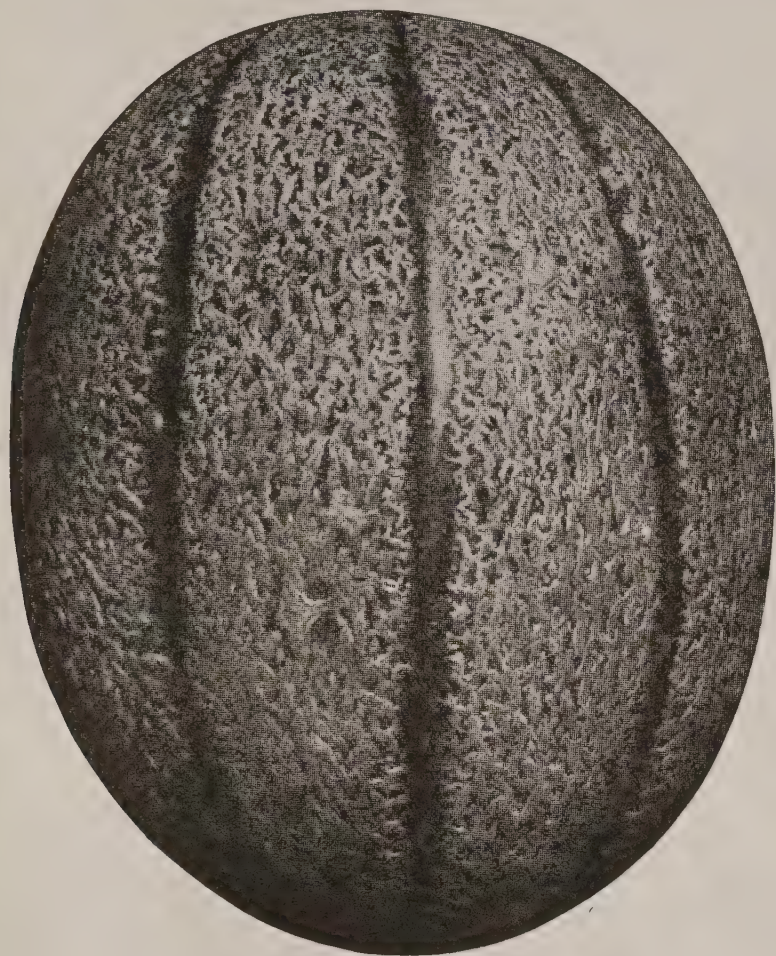
PERFECTION ORANGE FLESH (92 days)

At present this is the highest type of Rockyford.

The melons are almost perfectly round, heavily netted, no ribs, the orange flesh is extremely thick, sweet and spicy. Heavily productive. First rate shipper, local or long distances. Considered by many as the finest melon in existence when quality is the first consideration. Pkt. 10c; oz. 20c; lb. \$2.20.

MUSKMELON HEARTS OF GOLD (88 days)

Same as Hoodoo. A very popular, round melon, size 7 by 5 inches, weight two pounds per melon. Moderately netted, ribs fairly distinct, pink flesh, very thick, sweet and spicy. First class shipping melon as it remains edible for several days. Pkt. 10c; oz. 20c; lb. \$2.20.



SUGAR SWEET MELON (82 days)

Netted melon similar in shape to the Rocky Ford. Rather large sized and therefore not suitable as a crating melon. The flesh is green with a golden lining next to the seed cavity. Sweet and sugary. Pkt. 10c; oz. 20c; lb. \$2.20.

MUSKMELON WISCONSIN (90 days)

Pride of Wisconsin, also known as Queen of Colorado, is a large round melon with faint ribs and a very heavy coarse netting, golden yellow in color when ripe. The shell is unusually hard, flesh the thickest of any muskmelon of its size of an attractive deep orange color with a flavor that is the most distinctive of any melon—truly delicious. The melons remain edible for a number of days after being fully vine-ripened. Average weight 4 lbs. Size 7x6½ inches. Pkt. 10c; oz. 20c; lb. \$2.40.

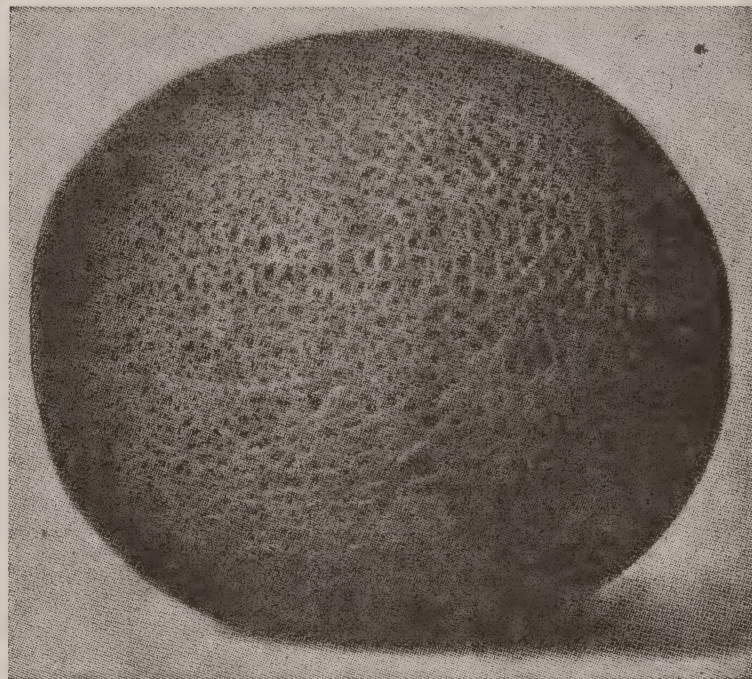
MUSKMELON SCHOON (83 days)

Also known as Schoon's Hybrid and Hard Shell Bender. A new highly flavored melon with deep salmon flesh similar to Bender's Surprise in shape and appearance. Valuable for its extreme hard shell which makes it a first rate shipper. Will stand in the field or market better than most other varieties. Deeply ribbed, well netted, skin yellow, average weight 5-8 lbs. per melon. Pkt. 10c; oz. 20c; lb. \$2.00.

MUSKMELON TERRY'S SPECIAL (85 days)

As early as H & B melon, average weight 6 to 8 lbs., 8 to 12 melons will fill a bushel. Outsell all other melons on the Omaha market. In shape it is a slightly flattened globe, is only slightly ribbed, slightly more so than Hale's Best No. 36. Flesh orange, soft, without a trace of stringiness, very sweet and fragrant, which is the reason why it outsells all other melons on the market. Its value is for local marketing. Cannot be shipped as the flesh is not firm enough for that purpose. Should be picked as soon as it starts to change color from green to yellow. Owing to "prosperity around the corner" not arriving yet, prices for melons are very low in our local market. As low as 25 cents per bushel. However Terry's Special sold at 50 cents per bu. The originator, Mr. A. M. Terry of Pacific Junction, Iowa, is growing melons as a specialty for many many years. The above is his own description of themelon. Pkt. 10c; oz. 20c; lb. \$2.20.

We sell half and quarter pounds at pound rate, 5 pounds or over at 10 pound rate, 25 pounds or over at 100 pound rate.



HALE'S BEST No. 45 (86 days)

Marketed under the trade name of "Sweet Eatin." Almost 100% mildew resistant, has quality, size, appearance, nothing any better and picked on a full slip and shipped across the whole country, arrives in perfect condition. Flesh salmon color, firm and sweet. Seed cavity small and holds firm days after the melon has been picked.

In fact the melons are of better eating quality after they have been picked for a few days. The shape is oval, size medium, the netting heavy. An ideal melon for shipping, rapidly becoming a leader in every section wherever Hale's Best is grown.

Flesh deep colored, of exceptional thickness, seed cavity is almost as small as that of Perfection. Average weight 4 lbs. per melon.

Hale's Best No. 45 is also known under the name of IMPERIAL No. 45. Pkt. 10c; oz. 20c; lb. \$2.20, prepaid.

MUSKMELON SUGAR ROCK (85 days)

Medium sized, of striking appearance, almost round, heavily netted, flesh deep orange, sweet, sugary and VERY firm. Rind very tough. Pkt. 10c; oz. 20c; lb. \$2.20.

ROCKY FORD (92 days)

We have an exceptionally fine strain of this standard melon. Heavily and finely netted, weighing about 2½ pounds each. Green fleshed. Highly rust resistant, very heavily productive. Pkt. 10c; oz. 20c; lb. \$2.20.

BENDER (Bender's Surprise) (94 days)—A large melon with pink flesh and of exceptional high quality. Weight per melon 9 lbs. and over. Pkt. 10c; oz. 20c; lb. \$2.20.

TIP TOP (96 days)—Large salmon fleshed melon with thick sweet spicy flesh, ideal for local markets where the demand is for melons of large size. Weight per melon 6½ lbs. Pkt. 10c; oz. 20c; lb. \$2.20.

DELICIOUS. This is the same as the variety SCHOON.

EARLY BENDER. This is the same as Schoon.

LITTLE BENDER. Same as Schoon.

MARYLAND or EARLY KNIGHT (82 days)—A fine very early melon, flesh green, sweet, shaped like Rocky Ford, slightly larger, well netted. Oz. 20c; lb. \$2.20.

KING AND QUEEN watermelon is worth growing, very much so, because of high quality and heavily productive, the melons in a patch literally cover the ground almost touching one another. Although rather of small size they possess quality which is contrary to the rule but a fact nevertheless. With other melons the rule is that unless the melon is big in size it lacks sweetness and flavor. **KING AND QUEEN** in this respect is in a class by itself, it is always good. Owing to its tremendous yielding qualities will show the grower good profit even when the melons are marketed at rather low prices. Try a few, induce your customers to try your small melons. All that will try, will come back for more.

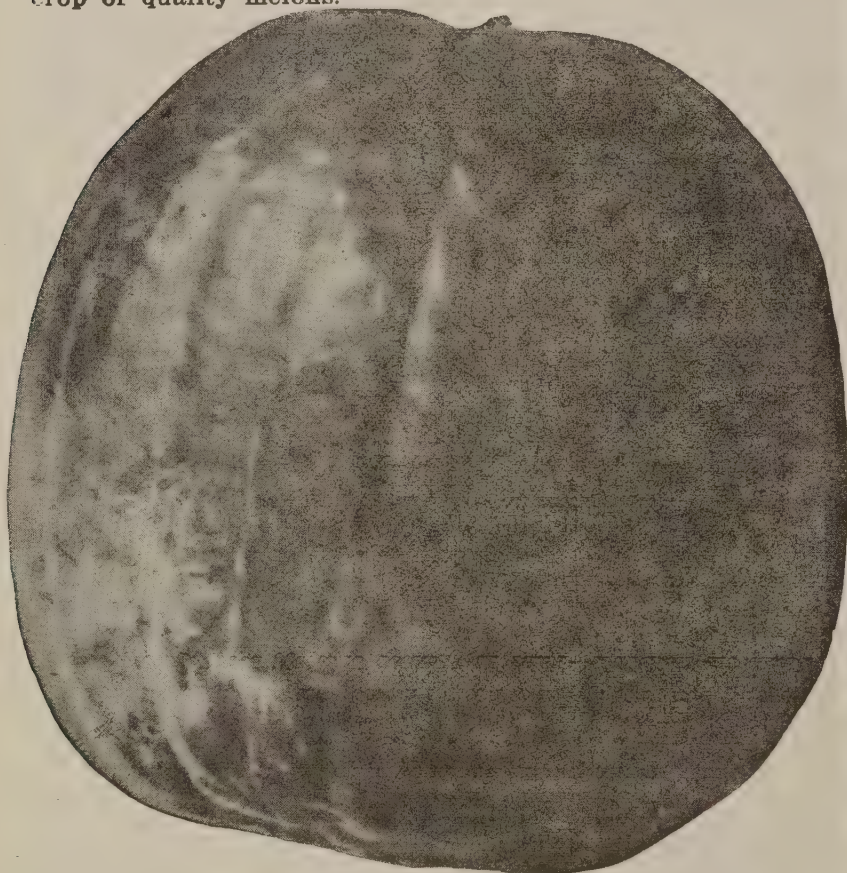
Watermelon

CULTURE—1 oz. for 50 hills, 1½ lbs. for 1 acre. Watermelons can be raised in any good soil but sandy soil mixed well with manure is ideal for melons. To grow watermelons successfully we recommend to seed the whole bed to rye in the fall. In the spring open two furrows with a plow throwing the soil together and plant the seed in hills 6 feet apart. When the plants start to vine open another furrow and continue this plowing under of the rye till the whole ground is covered with the vines. This does away with cultivating and fertilizes the ground.

THIN OUT watermelon vines to one plant per hill when the vines are in the fifth true leaf stage to get melons of the largest size. Do not allow more than one or two melons per vine. To keep striped beetles down apply lime but ONLY when the vines are dry, never when damp with rain or dew. Lime applied when the vines are wet burns and stunts them.

Which Is The Best Watermelon?

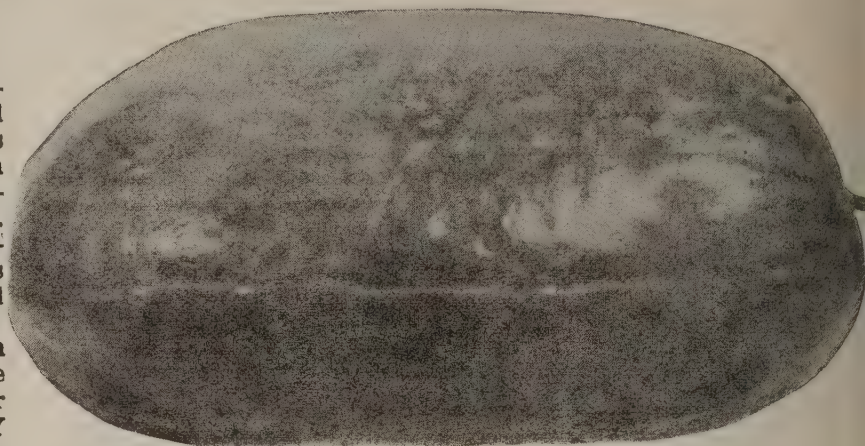
The best watermelon when it comes to quality is Klondyke. The most popular melons for local marketing and nearby shipping are: Red Russian, also known as Early Kansas, Kansas Sweet, Hutchinson and other names, Dixie Queen, Wondermelon and Kleckley Sweet. The leaders for long distance shipping are: Dixie Queen, Thurmond's Gray, King and Queen, Stone Mountain and Tom Watson. That is true of the present time. For how long? Most varieties of watermelons stay in favor for 2-3 years after introductions. New varieties come to the front to again become back numbers in a year or two. But we can say that any melon that we offer is safe to plant because provided the growing conditions are favorable any of the melons listed by us will produce a good crop of quality melons.



WATERMELON STONE MOUNTAIN (85 days)

Very large, round, smooth melon, rapidly gaining in popularity. Rind light green, flesh deep red and very sweet. Almost solid heart, having but few seeds which are white, tipped with black. It is not adapted for long distance shipping but for nearby markets, an excellent high quality variety. Pkt. 10c; oz. 15c; lb. \$1.40.

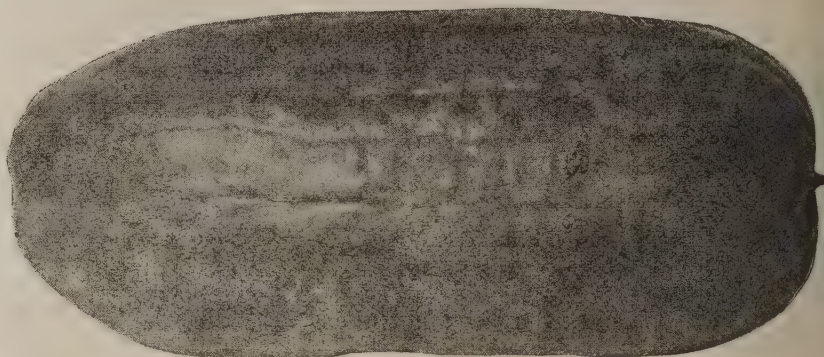
KING AND QUEEN WINTER MELON (85 days)—Of Russian origin, heavily productive and a sure cropper. Flesh bright crimson of very high quality, seed very black. Skin light green striped darker green. Perfectly round and smooth resembling a Honey Dew Melon. Average weight 10 lbs. When stored keeps for a long time and is a first class shipper. Outsells all other watermelons in some markets. Pkt. 10c; oz. 15c; lb. \$1.40.



WILT RESISTANT KLONDYKE (85 days)

Very similar in quality and appearance to the other types of Klondyke. Color solid dark green with a distinct "bloom" on the fruits which prevents sunburn. Seed mixed black and white. Well adapted for shipping. Almost 100% wilt resistant. Pkt. 10c; oz. 15c; lb. \$1.80.

CONSULT the front pages of this catalog. You will find many important novelties listed on those pages.

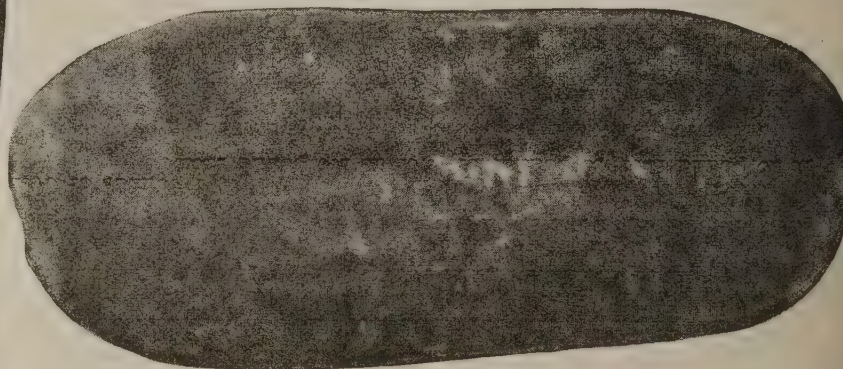


WATERMELON NEW WONDER (88 days)

AS GOOD AS KLECKLEY—AS BIG AS WATSON

Oblong in shape, longer and thicker in diameter than Kleckley, of dark green solid color with thin but hard and tough rind; for that reason just as good for shipping as Tom Watson. It has bright scarlet, very sweet and stringless flesh that never becomes hollow, and light colored seed. New Wonder has a good deal bigger heart than Kleckley and grows from 45 to 70 lbs. in weight. Heavily productive under trying conditions.

Pkt. 10c; oz. 15c; lb. \$1.80, postpaid.



KLECKLEY SWEET WATERMELON

The melon is oblong with square ends, color dark green, flesh bright scarlet with broad solid heart, absolutely stringless, of high quality, very crisp, sugary and fairly melting in the mouth. The individual melons weigh from 25 to 40 pounds. The rind is too thin for shipping. Pkt. 10c; oz. 15c; lb. \$1.80, prepaid. (85 days).

KLECKLEY SWEET No. 6 (85 days)

A new Wilt Resistant watermelon produced by the Iowa Experiment Station. One of the best strains of this variety. Flesh rich red, sweet and the fruit of good length. Certified seed. Pkt. 10c; oz. 15c; lb. \$1.80.

OUR WATERMELON SEED is Northern grown. We are located right in the center of watermelon seed production and that is why we can deliver seed of the highest quality at very moderate prices.

WATERMELON HAWKSURRY (85 days)

Hawksbury is a melon that is 100% wilt resistant, even when grown on the sickest kind of soil. It is an oblong melon in size the same as Kleckly Sweet. Rind greenish white, flesh a brilliant red and extremely sweet. Vine of extraordinary vigor producing a crop under even under unfavable growing conditions. Pkt. 5c; oz. 10c; lb. \$1.20.

WATERMELON KLONDYKE (90 days)

A most attractive melon in both outside appearance and especially when cut. The rind is tough, hard and fairly thick, color light green with irregular stripes of dark green. It does not show sunburn and is a good shipper. Flesh scarlet and sugar content is higher than in any of the other watermelons. Average weight 25 lbs. Its edible qualities very high. Pkt. 10c; oz. 15c; lb. \$1.80.

TOM WATSON RED HEART (90 days)

Popular wherever watermelons are grown on a large scale both for local marketing as well as for shipping. A great improvement on the old type of Tom Watson melon. Its rind is tough, very deep green, the flesh is deep red, fine grained, entirely stringless and exceptionally sweet. Average weight per melon 35-40 lbs., size two feet long 13 inches through. Also called Tom Watson Cut Red. Pkt. 10c; oz. 10c; lb. \$1.20.

STONE MOUNTAIN No. 5—Almost 100% wilt resistant but losing in favor because it lacks sweetness and the strain is somewhat mixed. Kleckley No. 6 is a much better melon in this class. Pkt. 5c; oz. 10c; lb. \$1.20.

WATERMELON KAHOW Extremely early, immensely productive, fruits small, oblong, rind very thin, dark green, mottled with blackish green, flesh salmon orange, very sweet. It is a quality melon. Will stand no shipping. Will be in heavy demand as soon as its merits become known and will be an important sort to grow for local market. Pkt. 10c; oz. 40c.

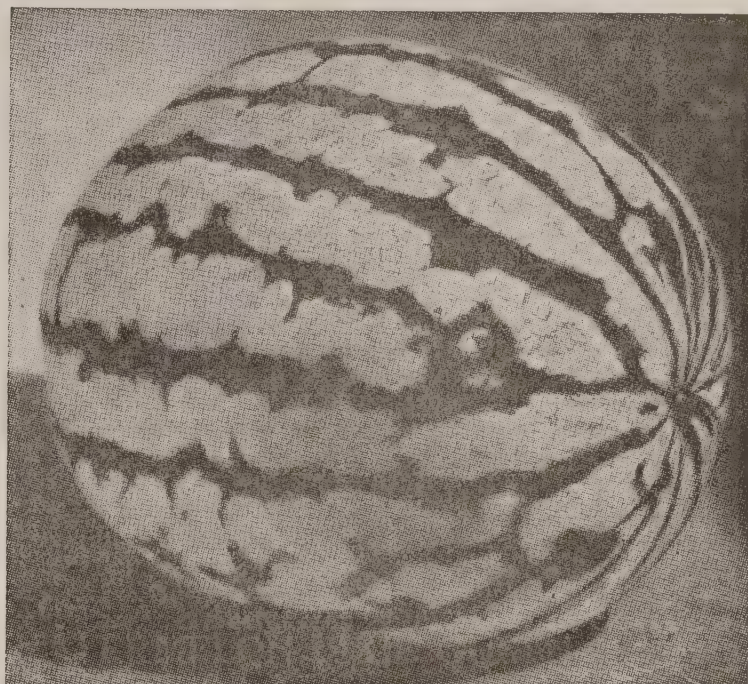
WATERMELON FLORIDA GIANT (90 days)

One of the largest of watermelons. If you will prune the vines to one or two fruits, the melons will weigh 80 lbs. each. Grown under usual cultural methods the melons average 35 lbs. They are oval-shaped with blunt ends, skin dark green, flesh bright red, firm and crisp, of excellent flavor. It is a 90-day melon, early enough to be grown successfully in the North. Known also under the name: Cannonball. Pkt. 10c; oz. 15c; lb. \$2.00.

SOMETHING NEW

in the watermelon line. In the not very distant future a class of melons, quite different from the standard varieties, will occupy the front on the stage. This is what we predict. These new melons have the following on their good side: Extreme earliness, high quality and high sugar content, thin rind eliminating waste, right size. They average ten pounds in weight, ice box or refrigerator size. There is only one drawback—the flesh of these melons is not the popular bright deep red. Their flesh is orange, pink, yellow and even white. Who does not remember the time when Golden Bantam Sweet Corn was received coldly because of its yellow color. But not for long. It will do no harm to grow this new class of melons for trial and, for trial only, till the time when their superior qualities will be better known and when it will be possible to market them in large quantities. At present we are offering only one variety in this new class under the name of KAHOW. Will offer more varieties in time to come.

HAVE YOU university education? If you have and if you had 100 university educations, you would not be really educated unless you understood MONEY. A newspaper man regarded by many as an extremely smart man, writing for a chain of newspapers, repeatedly states in his newspaper column that nobody understands money. Well! If nobody understood money, the fix the world would find itself in would be the same as when people could not understand each other in every day conversation. It is EXTREMELY important to understand money. You will understand money, you also will understand WHY the depression is on, why so many are near starvation, in short you will get wise and you will know a great deal more than you may know now, if you will read "The Book", which we will mail to you for only 25 cents.

**WATERMELON DIXIE QUEEN (85 days)**

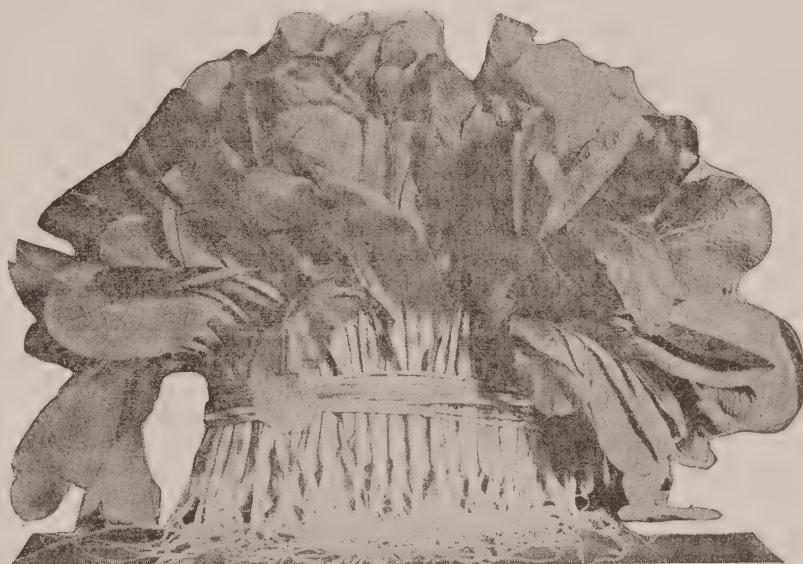
New. Pink fleshed melon, oblong in shape, rather large, vividly striped with light green, highly attractive. Quality very high. Seed white, quite small and the number of seed per melon is so small that it can be called "seedless" melon. Pkt. 10c; oz. 20c; lb. \$1.40, prepaid.

WATERMELON RED RUSSIAN (85 days)

Other names: Kansas Sweet, Wichita Red Seeded, Early Kansas, Hutchinson Stripe. Large oblong early melon, dark green, handsomely striped light green. Rind medium thick, well suited for carrying reasonable distances. Flesh rich red, sweet and of delightful flavor. Weight per melon 40 lbs. Pkt. oz. 15c; lb. \$1.40.

WATERMELON EARLY CANADA (75 days)

The earliest of all watermelons, maturing in 75 days from planting under ordinary growing conditions. A round melon, average weight 15 pounds, rind grayish green and thin, flesh bright red, sweet and of excellent flavor. Seed small dark brown. Pkt. 10c; oz. 15c; lb. \$1.60, prepaid.

**MUSTARD BAKTOY**

Different from other mustards and of all "greens" the king. Resembles an immense head of lettuce, but the leaves have very prominent midribs, exceedingly tender and juicy. The hearts are most excellent to be eaten raw either as celery or with salad dressing as a salad proper. Boiled or stewed no other greens quite equal it in tenderness and exquisite flavor. The whole plant is remarkably succulent, crisp and tender. All who have tried Baktoy are hearty in their praises of its flavor and high quality. Of quick growth, can be sowed in the spring, and again for a fall crop. Baktoy will stand nearly six weeks and all this time will remain in prime condition and shoots to seed only when the weather is quite dry and hot. Baktoy will be popular upon first trial and should appeal to growers who cater to a special trade where quality is appreciated. Pkt. 10c; oz. 15c; 1 lb. \$1.00; 10 lbs. \$8.00.

Mustard

CULTURE—1 oz. for 100 feet of row; 6 lbs. for 1 acre.

Mustard will do well in most any kind of soil. Sow very early in the spring or late in the fall. Have the rows 10 inches apart and do not thin at all if the crop is intended for greens. If grown for seed it must be thinned out to 6 inches apart in the row. In our locality can be sown up to August 10th.



MUSTARD OSTRICH PLUME (35 days)

Our special strain differs from other strains in the fact that it is the most attractive of all curly mustards that it is as tender as the leaves of lettuce and in the very important fact that it will stand without bolting to seed for two weeks longer than the regular strain. Of all curly leaved varieties our Ostrich Plume is the finest. Pkt. 5c; oz. 10c; lb. 80c; 10 lbs. \$7.00, prepaid.

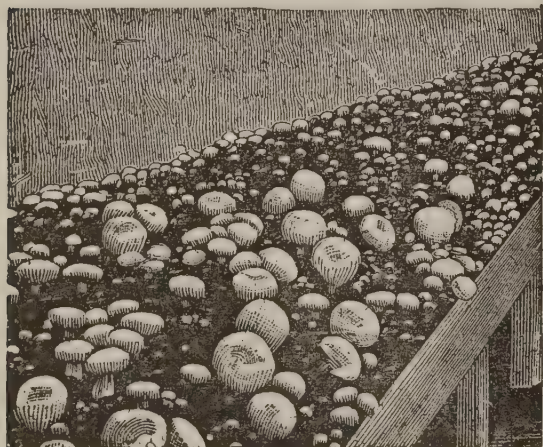
FLORIDA BROAD LEAF (40 days)—Vigorous upright grower, leaves extra large, thick and smooth. Pkt. 5c; oz. 10c; lb. \$1.20.

SOUTHERN GIANT CURLED (35 days)—Our strain of this Mustard is very superior. Pkt. 5c; oz. 10c; lb. \$1.20.

MUSTARD BAKTOY (35 days)—In appearance like an immense head of bunch lettuce, stalks much heavier, full of juice and flavor, the finest green vegetable to our way of thinking. Pkt. 10c; oz. 15c; lb. \$1.00.

MUSTARD TENDERGREEN (25 days)

A new vegetable resembling curled mustard but much heavier and more bulky. Prepared like spinach makes delicious greens. Develops in very short time, producing several crops in one season, withstands great amount of cold as much as Bloomsdale spinach or mustard also withstands summer heat, slow to shoot to seed. Leaves curly, very light green, very attractive. Pkt. 10c; oz. 20c; lb. \$2.00, prepaid.



MUSHROOM SPAWN

Genuine Lambert's

PURE CULTURE—made in America and the best in the world, fresh and full of vitality. A cultural leaflet "Mushroom Culture" free when requested with orders. Price: Brick 50c; 5 bricks \$1.75, postpaid. Not prepaid, 10 bricks \$2.00; 100 bricks, \$19.00.

CONSULT the front pages of this catalog. You will find many important novelties listed on those pages.

Parsley

CULTURE—1 oz. to 100 feet of row, 4 lbs. to one acre.

Parsley does best in deeply worked good soil. Sow early in the spring in rows a foot apart, thin out the rooted varieties to 3 inches apart in the row but do not thin the curled varieties. Parsley is slow to germinate and it is a good plant to sow a small quantity of radishes with the parsley. Radishes come up quickly and mark the rows and you can cultivate long before the parsley comes up. It takes a month or longer for parsley to come up.



IMPROVED PERFECTION PARSLEY

Dark green, densely curled, almost entirely free from plain leaves and of very robust and quick growth. For the largest amount of leaves also for growing under glass this is the best parsley you can get. Pkt. 10c; oz. 15c; lb. \$1.60.

PARSLEY GREEN GEM—Darkest green and most densely curled. Of dwarf compact growth. Not a single leaf in this parsley but that is most exquisitely and closely curled. Somewhat a slow grower in the first stages of its growth. An exhibition variety.

Which is the Best Parsley

PERFECTION is the most highly bred curled parsley of vigorous growth with not a trace of "wild" parsley in it. Perfection is the only variety to grow in greenhouses where space is costly.

The best rooted parsley is **RECORD**. It is little later than Hamburg Rooted but the roots are much larger, resembling well grown roots of parsnip, white smooth and of high quality.

CHAMPION MOSS CURLED PARSLEY

Of quick and robust growth, very hardy, with leaves of dark green color, finely curled. Pkt. 10c; oz. 15c; lb. \$1.40, prepaid.

GIANT ITALIAN PARSLEY

ITALIAN GIANT is the same as celery parsley. Plants 3 feet tall, bushy producing an immense amount of plain leaves with exceptionally strong parsley flavor.

HAMBURG ROOTED PARSLEY

The root resembles a miniature parsnip. This variety is very early and fine flaxored. Pkt. 10c; oz. 20c; lb. \$2.00, prepaid.

ROOTED PARSLEY RECORD

Our Rooted Parsley **RECORD** has roots 2 inches or over in thickness, the roots are smooth, white 10 inches long or over, in a word, parsley **RECORD** is the best rooted parsley there is. If you will try, you will be surprised. Pkt. 10c; oz. 20c; lb. \$2.00.

You can order all seeds priced at 45 cents per oz. or over in quarter and half oz. lots at oz. rate. Quarter and half pounds at pound rate. Five lbs. or over at 10 lb. rate. 25 pounds or over at the 100 lb. rate.

WE FILL ALL SEED ORDERS THE SAME DAY AS RECEIVED

Reliable Onion Seed

CULTURE—1 oz. for 100 feet of row; 3 lbs. for one acre. For sets 60 to 70 lbs. of seed should be sown to the acre, more if the ground is light. For a good crop of onions you must have rich ground. Have the land spaded or plowed in the fall. Do not plow again in the spring. The idea is to have a firm seed bed which is one of the important conditions for success. Before you sow work the top soil very fine with a rake then sow. Get the weeds as soon as they appear. It is very important to sow as early as it is possible to get the ground in shape. For extra large and heavy bulbs, such sorts as Ailsa Craig or Prizetaker are sown in hotbeds and later transplanted into row 14 inches. The most popular method is to sow the seed in rows a foot apart and thin to 3 inches apart in the rows.

What Is The Best Onion?

For winning money **EARLY BEAUTY** and **SILVERBALL** are the best. One is a yellow skinned variety, the other has skin that is almost white. Both are of fine appearance and ready for the market days ahead of the old varieties. Both will make money for the grower.

For main crop, there is no better Onion than any of the **SOUTHPORT GLOBES**. Whether you choose the white, red or yellow, you are making no mistake and wherever the Globe sorts can be successfully raised they should be preferred over all other varieties. The Globe Onions as far as we know are not particularly adapted for Texas. There it is where the Bermuda onions are popular and most largely grown. As is well known Bermuda Onion is the mildest flavored of all onions but its drawback is that it is not a very good keeper and is good only for quick consumption. **BERMUDA ONIONS** can be grown in any state of the Union but good seed can be grown only on the Canary Islands and all our seed comes from there.

AILSA CRAIG. Properly grown, this forms the biggest bulb of all Onions and can be grown everywhere except very far north where the season is short. Is a fairly good keeper.

The best pickling Onion is **WHITE PORTUGAL** or Silver Skin. It keeps well, is early and retains its silvery white color which such sorts as Bartletta and others never do. Bartletta turns green and never makes as nice looking bulbs as Portugal.

In the last few years quite a few gardeners have undertaken to grow a fairly large planting of Onions, planning to market them. To all such who have not heretofore grown Onions in a large way we offer this suggestion: Always plant the variety of Onion demanded or favored by your market rather than the sort you personally prefer. In every market certain sorts of onions are preferred over others. There are markets where you cannot sell and do well financially unless it is a red onion. Other markets again demand yellow, and still others white onions. In some markets you cannot sell anything but Yellow Danvers, etc. Therefore before you place your order for Onion seed get reliable advice as to which is the most reliable variety for the market where you intend to dispose of your crop. Commission men or your grocer is the party to see about this.

If you will address the Secretary of Agriculture, Washington, D. C., for Bulletin No. 354 Onion Culture, it will be sent you without cost.

Our **ONION SEED** is dependable. Germination close to 100%. Lots of seed on the market germinates 80% or less. Many of our customers that raise onions on a large scale tried low priced seed from many sources. They cut their expense at the time of buying their seed but lost and in some cases they lost heavily on the crop. These customers use our seed again—they do not want the low priced stuff.

BERMUDA ONIONS

WHITE OR YELLOW BERMUDA ONION (92 days)—The flesh is white, the skin light yellow, mild in flavor so that many people eat it raw like an apple. We offer the best seed, genuine Tenerife. Pkt. 10c; oz. 45c; lb. \$6.00.

CRYSTAL WAX BERMUDA (90 days)—Somewhat larger than the yellow variety, absolutely pure white. Pkt. 10c; oz. 45c; lb. \$6.50.

WHITE SWEET SPANISH

The largest of the white onions. Identical with the original Sweet Spanish except in color which is pure white. Flesh clear white, firm and mild. Very attractive and a fair keeper. Pkt. 10c; oz. 60c.



SOUTHPORT RED GLOBE ONION (112 days)

Our strain is famous for the large sized bulbs it produces. Perfectly globe shaped, color deep bright red. There is no finer strain than ours. If you understand that the important thing is the value of the **CROP** and not the price of the **SEED** you will try our seed so as to be able to compare the **RESULTS** our seed produces with the results of low in price seed. You will be surprised. This is also true when it comes to other seeds we send out. A comparison will **SHOW** you that the seed offered for a very low price is **NOT** the bargain it seems to be. Pkt. 10c; oz. 60c; lb. \$6.00.

BRIGHAM YELLOW GLOBE

Bulbs globular, solid, well covered with tight fitting thick skins of uniform dark brown color. Valuable because it yields heavily and is a good keeper. Pkt. 10c; oz. 50c.

YELLOW SWEET SPANISH (110 days)

A large globular onion with light yellow skin. Flesh white, mild, sweet and of pleasing flavor. Good keeper. Withstands unfavorable growing conditions better than many another variety and the bulbs will sometimes reach a diameter of five inches. Also known as: Valencia and Riverside Spanish. Incorrectly called Bermudas onion. Pkt. 10c; oz. 60c.

MOUNTAIN DANVERS ONION (110 days)

An early maturing type of Danvers Globe, slightly smaller in size, but ripening 10 days before the old type of Danvers. Pkt. 10c; oz. 50c.

Ours is the most critical trade—gardeners and florists. We cater to the wise and experienced. We give value. Among our customers are the foremost florists and market gardeners.

AN EXTRA EARLY PEA is **WELCOME PEA**. They just simply cannot be beat. Since we have been growing these we have peas before anyone in this locality. Last year I think we picked first ones around June 7th about 3 weeks earlier than most folks. So says a customer from Ohio.

We sell half pounds at pound rates, 5 lbs. or over at 10 lb. rate, 25 lbs. or over at 100 lb. rate.



SOUTHPORT WHITE GLOBE (112 days)

A perfect globe, large and very solid. One of the best for storing over winter. Sells well in any market, especially if harvested as soon as ready and dried in the shade so as to preserve its whiteness. Heavy users of onions like hotels, restaurants, etc., buy S. White Globe whenever they can get it. Our seed is of the highest quality and if you will try you will find it is the best and for less. Pkt. 10c; oz. 60c; lb. \$7.00, prepaid.

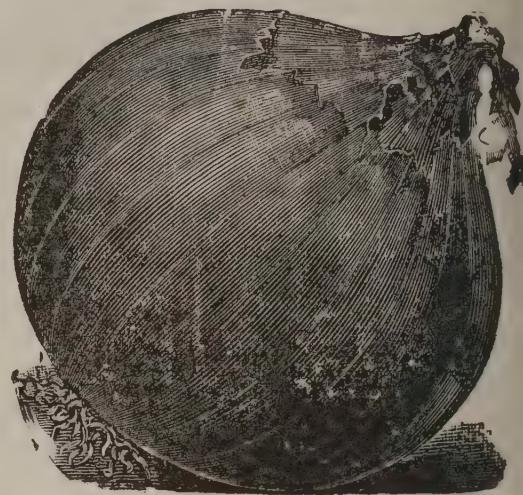
You can order all seeds priced at 40 cents per ounce or over in quarter and half ounce lots at ounce rate. Quarter and half pounds at pound rate. Five pounds or over at 10 pound rate. 25 pounds or over at 100 pound rate.



SOUTHPORT YELLOW GLOBE ONION (114 days)

Perfectly round, solid, fine grained of mild flavor, with deep golden yellow skin. Extra good keeper and a ready seller in all markets, especially so in the East. The seed we offer is raised in the East by a grower of long years of experience who specially selects this seed from large perfectly shaped, well colored and solid bulbs, well cured and ripened, carefully avoiding all thick necked ones. Pkt. 10c; oz. 60c; lb. \$6.00.

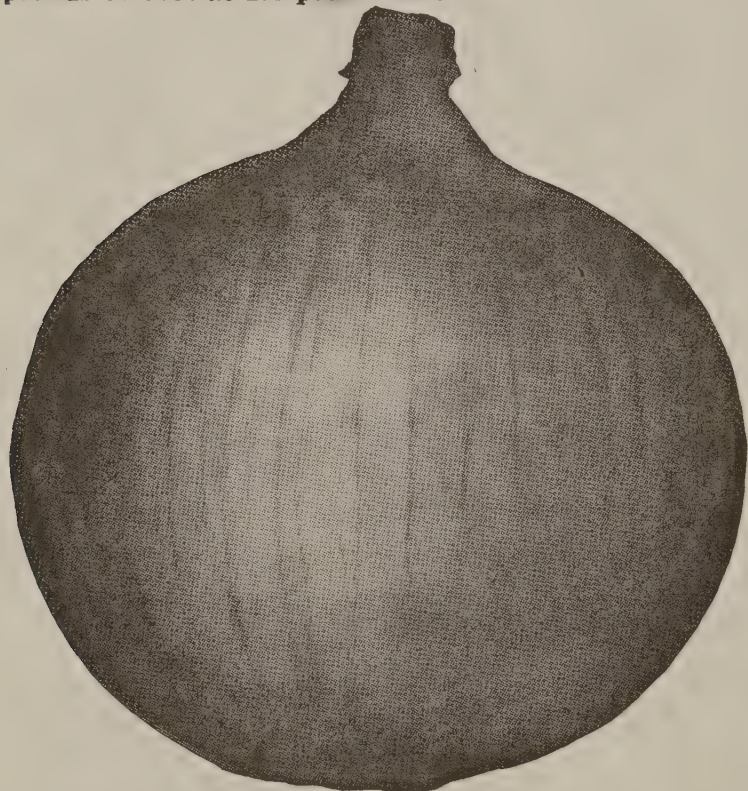
Do you know that we are the actual growers of many seeds we sell?



YELLOW GLOBE DANVERS (114 days)—Quite globular in shape entirely free from thick necks, heavily productive. Pkt. 10c; oz. 50c.

GROWING LARGE ONIONS

To grow fancy, extra large onions, sow the seed of Prizetaker or Valencia in a cold frame about Feb. 1st. Keep the frost out by covering the frames with sashes before you sow as well as after sowing. When the plants are 6 in. high and about as thick as a pencil, they are ready to be set out. Clip the tops about one-third. Also the roots if too long, to avoid doubling up of roots when setting. Plant in rows foot apart and 6 in. apart in the row. Use a "dibble" with ten pegs nailed 6 in. apart. Set the plants in holes made by the "dibble" about an inch deep.



ONION EARLY BEAUTY

A local grower regarded here by all who know him as one of the best gardeners in our locality grew for a trial in 1929 our Early Beauty Onion. He says this: That onion of yours is certainly the thing. Had I planted my few acres all with this onion, the way the prices were this year, I could have easily made ten thousand dollars.

We are harvesting at this time your Early Beauty Onion. This seed, planted under precisely same conditions as three other early varieties from other seedmen, proved itself the better. A nice bulb admired by all. It is all you claim for it, etc. From a customer in New Jersey.

ONION EARLY BEAUTY (97 days) . EXTRA EARLY—HIGHLY ATTRACTIVE

Weeks ahead of other Onions in earliness and ready for market at a time when other onions are the size of marbles. Bulbs very large and almost a globe in shape, slightly flattened on top. The skin is dark, rich yellow, adhering firmly to the bulb, making it conspicuously clean and neat. Early Beauty Onion was on exhibit in one of the large local grocery stores together with many other onions, that we grew, for comparison and for trial. Early Beauty was unanimously pronounced to be the choicest of all. The appearance of the bulb is such that at first sight anyone can see that it is a very solid onion, and one that has long keeping qualities. Early Beauty ripens evenly and being highly attractive in appearance and matured long before other onions are ready, it is readily salable at top prices on any market. Early Beauty will make money for the grower—that has been proven. Pkt. 10c; oz. 50c; 1 lb. \$6.00.

ONION SETS



Onion set prices are subject to market change. Write for prices on quantity lots. We grow Onion Sets on a large scale.

All Postpaid	1/2 lb.	1 lb.	
White Onion Sets.....	\$0.20	\$0.40	
Red Onion Sets.....	.20	.40	
Yellow Sets .....	.20	.40	

CARROT GOLD GOIN
is weeks ahead in earliness, the roots of just right size. Makes money for the grower.

ONION SILVER SKIN (100 days)

SAME AS WHITE PORTUGAL—An early, flat, silvery white variety, without a flaw. Good keeper, retaining its fine white color much better than Barletta or any other pickling sort.

VARIETIES OF ONION

WHITE BARLETTA (92 days) — Small, white sort, good for pickling or bunching.

WHITE PICKLING (82 days)—Used exclusively for pickling.

WHITE PORTUGAL—See Silver Skin.

Ours is the most critical trade—gardeners and florists. We cater to the wise and experienced. We give value. Among our customers are the foremost florists and market gardeners.

WHAT KEEPS PRICES DOWN?

Inferior stocks. Too many gardeners bring to market vegetables, that really should never reach the market—poor in quality. Poor stuff is hard to sell, even for a low price. These producers of low grade vegetables stand on the market for hours, their vegetables are not moving, they lose patience and in the end sell to peddlers for whatever they can get. And they get mighty little. The peddlers then start on their routes, they cover the whole city, they sell to households. That kills the call for good stuff, for sale in the regular stores. The storekeeper cannot sell, because his customers are loaded with the cheap peddler's stuff. What is to be done about it? Organize, educate, preach quality. Grow less, save time, hard work and expenses, offer for sale only the very best. For high grade produce you will get good prices.



Ailsa Craig
Onion

ONION MINNESOTA GLOBE (112 days) LONGEST KEEPER OF ALL ONIONS

Of beautiful appearance, dark bright red, a slightly elongated globe, a shape superior to any other globe shaped onion now in existence.

Will keep in storage till June without sprouting, an absolute fact. This cannot be said about any other onion and makes Minnesota Globe the longest keeping onion of ALL onions. Pkt. 10c; ox. 60c, prepaid.

PRIZETAKER ONION (102 days)

Prizetaker is of excellent quality, of attractive appearance, always uniformly and perfectly globe shaped, of bright clear straw color and as mild in flavor as the imported Spanish onions. No other onion ever met with such universal favor and became popular as rapidly as Prizetaker. It is the best onion for size, mildness of flavor, keeping qualities as well as large yield, and succeeds well everywhere, North, South, East and West. Pkt. 10c; oz. 50c; lb. \$7.00.

ONION WHITE BUNCHING (40 days)

A quick growing onion for bunching, ready to sell 40 days after sowing. Does not knob like other varieties. Stalks white, tender and mild in taste, 14 to 18 inches high, the pure white lower part extending 2 to 3 inches up the stalk. Stays in bunching condition a long time and stands the heat well. If left standing to fully mature it develops bulbs that are almost 3 inches in diameter. However it is not recommended for large onion because in keeping qualities it is not the equal of such varieties as Minnesota Globe, Ebenezer and others. Sown in rows fairly thin needs not to be transplanted. Crop failed.

MANY LONG ESTABLISHED, big, wise and experienced growers use our seeds. There is a reason.

AILSA CRAIG ONION (102 days)

One of the largest of all onions, rapidly gaining in popularity. The bulbs are very uniform in size, shape almost globular, with sulphur yellow skin, neck very small, the interior white, fine grained, flavor mild and sweet and a good keeper. Ailsa Craig is in every way as large and handsome as the finest imported Spanish Onion and superior to it on account of its remarkable keeping and very heavy yielding qualities. To attain the greatest possible size this variety should be sown early in the spring in a hot bed and transplanted later in the open. Ailsa Craig is a variety of English prize winning stock. Anyone wanting an extra large fine looking onion, especially for exhibition purposes, should plant Ailsa Craig. Pkt. 10c; oz. 50c; lb. \$7.00, prepaid.

Okra

CULTURE—2 oz. for 100 feet of row, 8 lbs. for 1 acre. Plant when the ground is thoroughly warm, in rows 3 feet apart and thin out to 2 foot in the rows. Gather the pods while they are young.

CLEMSON OKRA (56 days)

New Clemson Spineless Okra produces a heavy crop of rich, green, ridged, slender pods, almost absolutely free of spines. Pods tender with much less fiber than is the rule and fiberless when picked young. Pkt. 5c; oz. 10c; lb. 80c.

OKRA FIRST CHOICE (50 days)—Pods dark green, fluted, slender, when young, at which stage they are absolutely without fiber and very tender. If you are looking for quality grow First Choice. Plants 3½ feet tall. Pkt. 5c; oz. 10c; 1 lb. 80c.

OKRA WHITE VELVET (60 days)—Pods very light green, thick, meaty and tender when young. Plants 3½ ft. tall. Pkt. 5c; oz. 10c; lb. 80c.

PERKINS MAMMOTH (56 days)—Pods dark green, slender, tender when young. Plants 5 ft. tall. Pkt. 5c; oz. 10c; lb. 80c.

**WE FILL ALL SEED ORDERS THE SAME
DAY AS RECEIVED**

Garden Peas

CULTURE—3 lbs. for 100 feet of row. 3 bushels for 1 acre.

EARLY VARIETIES—Plant as early in the spring as the ground is thawed out to the depth of about 3 inches, sow by hand very thickly in a trench about 2 inches deep.

Peas properly sown lay in the trench at places so thick as to touch one another and of course in some places they will be an inch or two apart, in other words, you cannot sow them evenly by hand. The idea is to sow as thick as to have the vines close together so that they will hold each other erect. This does away with support and the pods will be kept off the ground. Many gardeners have been very stingy with the seed, they planted way too thin. The results of thin planting are: The vines since they are wide apart cannot support each other and the first rain that comes beats them down and they lay in the mud, the pods start to rot and half the crop is lost. To pick the pods from such planting is no pleasure. To sow thickly as we are advising is the only profitable method. It will insure a heavy crop and the job of picking will be an easy one.

LATE PEAS—These can be planted at any time from March 15th up to May 1st. The method of culture is the same as given for early peas but long vined varieties like Telephone and others must be supported by trellis or brush. Peas do well on most any soil, but low and excessively rich ground should be avoided as on such ground the crop has a tendency to grow rank vines but not pods.

SMOOTH AND WRINKLED VARIETIES—Seed of some sorts of peas is smooth and other wrinkled. You have been at all times advised not to plant the wrinkled sort as early as the smooth seeded. In our experience we find that the wrinkled sorts can be planted just as early as the smooth seeded without any injury. All varieties of peas offered by us with the exception of Alaska have wrinkled seed.

LAXTONIAN PEA (62 days)

LARGE PODS—VERY EARLY

The vines are of sturdy, vigorous and healthy growth, with deep green leaves, grow only 16 to 18 inches high, require no supports of any kind, bear in prodigal abundance from top to bottom of vines, large dark green plump pods which contain 8 to 10 delicious Peas of double the size of any other early Pea. Laxtonian has pods as large and the seeds are of such high superlative quality that they fully equal the best main crop Marrowfat variety. Hardy and very early. Pkt. 10c; ½ lb. 18c; 1 lb. 35c, prepaid. 10 lbs. \$2.20; 100 lbs. \$20.00, not prepaid.

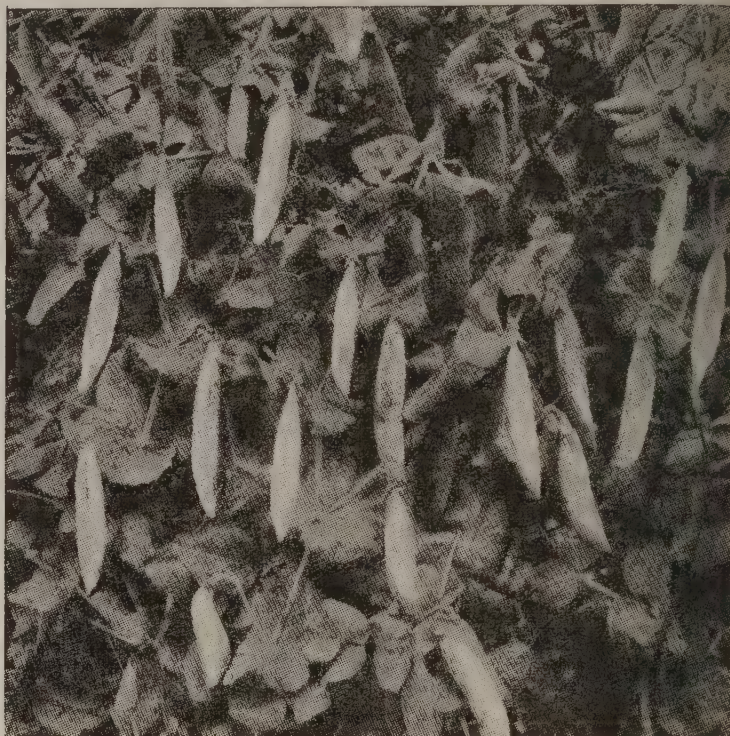
LITTLE MARVEL PEA (62 days)

It is a great improvement over American Wonder, having larger pods which contain usually two or more peas to the pod. The pods are of deep green color, a feature of great importance, filled almost to bursting with luscious, sugary, large and better peas, frequently borne in pairs. The vines are of uniformly even growth, averaging 15 inches in height, the pods average 3½ inches in length and are square at the ends, remaining in prime condition for a week longer than those of either American Wonder or Nott's Excelsior. Pkt. 10c; 1 lb. 35c, prepaid. 10 lbs. \$2.20; 100 lbs. \$20.00, not prepaid.

POTLACH OR BIG DINNER PEA (75 days)

The vines are vigorous and strong, of even growth, 20 to 24 inches in length, with luxuriant dark green foliage, bearing pods of rich green color which average 4 inches in length and are filled to bursting with 9 to 11 luscious, sugary Peas of finest flavor and best quality. The pods are quite broad, pointed at the ends and usually borne in pairs. No other variety will produce more pods, and no pods could shell out better. In season it is quite early, pods being fit for table use in about sixty days after planting. The Potlach is a variety of great merit. Pkt. 10c; ½ lb. 15c; lb. 30c; 10 lbs. \$2.20; 100 lbs. \$20.00, not prepaid.

SUGAR DWARF GRAY SEEDED (70 days)—Used the same as snap beans, both pod and pea being eaten. The pods are broad, sweet and tender. Pkt. 10c; ½ lb. 20c; 1 lb. 40c, prepaid.



DE GIORGI'S MODEL PEA (61 days)

BIG PODS—EXTRA FANCY—EVERBEARING

Extra early pea, yielding an enormous crop of dark green pods 4 inches long, fairly broad pointed, containing 8 to 9 large dark green peas, tender and sweet. The vines are short, not over 18 inches. Unlike other peas MODEL can be planted for succession of crops throughout the entire season as it bears even in hot weather. From one planting you will harvest two full crops of pods. When you pick the first crop, your vines will cover themselves again with bloom and produce another crop. And under good conditions MODEL produces three crops from one planting. DeGiorgi's Model is one of the best extra early, large podded peas we know of, sure to pay you handsomely. 1 lb. 35c, prepaid; 10 lbs. \$2.20; 25 lbs. or over at 20c per lb. F. O. B.

HUNDREDFOLD (63 days)—Outstanding among the early varieties of Laxtonian type, hard to beat for truckers and shipping. Pods single, broad, very deep green, pointed, somewhat curved, containing eight large peas of excellent quality. Vine 18 inches tall, upright growing and very dark green. Lb. 35c, prepaid. Unprepaid: 10 lbs. \$2.20; 100 lbs. \$20.00.

GRADUS—An early variety bearing on vines 3 feet tall, handsome pods about 4 inches long of light green color. The pods are frequently not well filled. This is the nature of this pea and has nothing to do with the quality of the seed. Pkt. 10c; ½ lb. 20c; lb. 30c, prepaid. 10 lbs. \$2.20; 100 lbs. \$20.00.

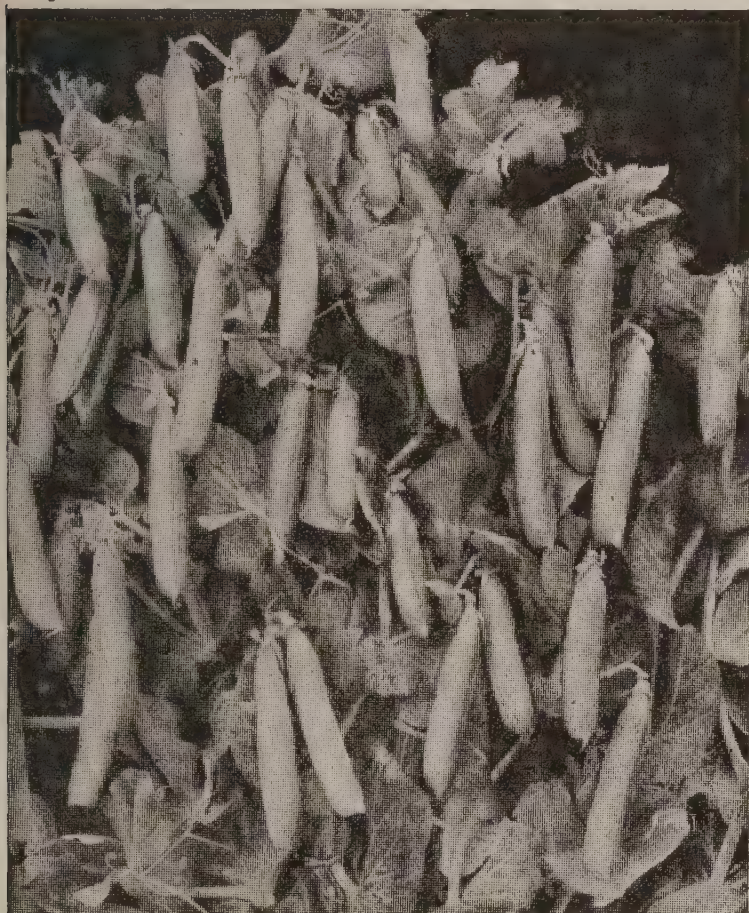
PEA GIANT HAMPER (63 days)

New. In our trials Giant Hamper proved a very much exceptional early pea. It outyielded all other peas in the extra early group. Pods of great size 4½ to 5 inches long, three quarter inches through, dark green, pointed, filled with 7 to 9 very large peas of excellent quality. We assure you that if you will grow Giant Hamper that you will find it a quick selling and profitable kind and we strongly urge you to try Giant Hamper. Pkt. 10c; lb. 40c, prepaid. Not prepaid: 10 lbs. \$2.20; 100 lbs. \$20.00.

THE KEY TO SUCCESS

for you is GOOD SEEDS. GOOD SEEDS are also the key to our success. We are doing our very best in order to have seeds of the best quality and the latest creation in flowers and vegetables.

PRICES: For Peas in lots of 10, 25, and 100 lbs. are F. O. B. Council Bluffs. We sell 5 pounds at 10 pound rate, 25 pounds or over at 100 pound rate.



NEW PEAS WELCOME (53 days)

If you are growing peas for the market, you certainly would find growing peas, way more interesting than it is if you had peas to sell ten days ahead of the usual type.

You can have such peas. This pea is our Welcome.

Welcome is a short pea, vines about two feet high, loaded with handsome, well-filled, sea-green pods. If by growing Welcome you will net make good money, you will not by growing any other pea. If you will not try Welcome, growing for the market, you will lose. Pkt. 10c; lb. 40c, prepaid. Not prepaid. 10 lbs. \$2.10; 100 lbs. \$19.00.

PEA WYOMING WONDER (70 days)

Produces a heavy crop of very large dark green pods 5 to 6 inches long, containing 8 to 10 large peas of unusually fine flavor that remain sweet and tender 7 to 10 days after ready to pick. Vines dark green, vigorous, 24 to 28 inches tall, 100% resistant to fusarium wilt. Where climatic conditions permit of planting a late maturing pea Wyoming Wonder will prove a well paying sort. Pkt. 10c; lb. 35c, prepaid. Unprepaid: 10 lbs. \$2.20; 100 lbs. \$20.00.

WHICH PEA IS THE BEST?

Market growers must plant only the highly developed new varieties, in order to stay on the right side of the ledger. These are: For the earliest crop WELCOME, a large podded pea with pods not very well filled out and of rather pale green color. Welcome makes a crop days ahead of even the finest strain of Alaska, and no other pea will show the grower better profit. Mark, that we recommend Welcome ONLY for the earliest crop. To follow Welcome, Laxtonian or Model should be planted. Blue Bantam will be ready 4-5 days after Laxtonian and should be planted by every grower because the pods are extra large, well filled, dark green and of the very finest quality. The best medium early pea is Potlach and for a late crop Chieftain is hard to beat. We would never touch such varieties as First and Best, Alaska, Gradus, etc. All these WERE fine varieties years ago and are a poor excuse for peas today. We list these varieties however because there are still calls for these "back numbers."

LITTLE MARVEL—This is a pea among peas. Has small pods, does not fill the basket as fast as the Laxtonian types of peas, yet of all early peas Little Marvel is the king. A standard market basket of Little Marvel weighs three pounds more than a basket filled with Laxtonian type of pea. The customer is getting more in weight and very high quality on top of it. Little Marvel is a pea to grow in every case where quality is appreciated and rewarded. Growers that cater to markets in which peas are peas and the price the same for all, will do better growing the larger podded peas.

SOUTHERN TABLE PEAS

Southern Table Peas or edible Cow Peas resemble bush beans in growth, requiring same culture and being prepared for the table same as "string beans." The crop of pods is tremendous. The pods are round, straight, meaty and tender almost a foot long, packed with as many as 21 luscious sugary peas. Plant at the same time as string beans when the weather is warm and settled.

EXTRA EARLY BLACK EYE—Ready in 50 days from date of planting, bearing a heavy crop of fine, long, straight, well-filled pods. Popular market variety because early. Pkt. 10c; lb. 35c, prepaid. Not prepaid, 10 lbs. \$1.95.

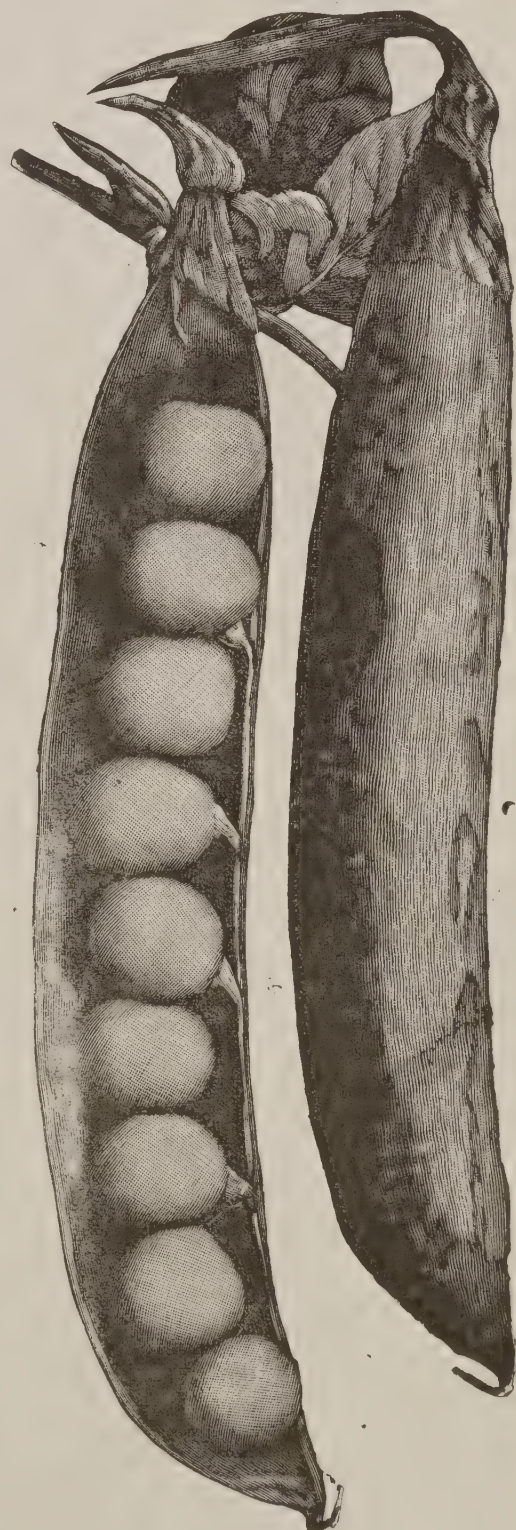
CREAM CROWDER—Produces green peas in 85 days. One of the best flavored table peas and very heavily productive. Crop failed.

PRICES: FOR PEAS IN LOTS OF 10, 25, AND 100 LBS. ARE F. O. B. COUNCIL BLUFFS. We sell 5 pounds at 10 pound rate, 25 pounds or over at 100 pound rate.

NEW PEA—CHIEFTAIN (70 days)

Chieftain Pea—(Starosta) leads all other peas, dwarf or tall, early or late, in size of pod and productiveness. The vines are truly burdened with large, broad, medium dark green pods, and every pod is well filled with extra large, tender, delicious sweet peas. It is the best and most profitable pea to grow, to follow Gradus or Laxtonian and ripens just a few days ahead of Telephone. The pods are very attractive in appearance, they are very broad and heavy, and soon fill the baskets. The vines are 2½ feet tall, requiring no staking, very strong and sturdy of deep green color. The pods are from 4½ to 6 inches long, and contain from 8 to 10 large, bright green peas.

Chieftain is the largest podded pea that we have ever grown, and we have never seen so many pods on a vine, not even in the far north where the climate for the perfect development of peas is ideal. Chieftain can be justly called the Jumbo of the pea family and we recommend it strongly as the best main crop variety to all, and especially to those who wish to grow the largest sized pods for exhibition purposes. Pkt. 10c; ½ lb. 20c; lb. 40c; postpaid. Not prepaid: 10 lbs. \$2.20; 100 lbs. \$20.00.



Chieftain Peas

ALDERMAN PEA (74 days)

A medium early pea, heavily productive, with very large, straight dark green pods. An excellent sort. Pkt. 10; ½ lb. 20c; 1 lb. 40c, prepaid. 10 lbs. \$1.90; 100 lbs. \$16.00.

ALASKA (63 days)—An early smooth seeded pea of fair quality. Pkt. 10c; lb. 30c, prepaid. Not prepaid: 10 lbs. \$1.50.

LAXTON'S PROGRESS (62 days)—Laxtonian type, pods 4-4½ in. long, dark green, well filled. Heavy yielder, extra early, first class market sort. Height 18 in. Lb. 40c, prepaid. 10 lbs. \$2.20; 100 lbs. \$20.00, not prepaid.

How to Get a Crop of Early Peas

By cultivating intensively. Peas do not need any great deposits of manure in the ground, they gather the nourishment from the air (nitrogen), they leave the ground in better shape after giving a crop of pods and all you have to do is to cultivate and again cultivate, the more the sooner you will have pods to pick. By this method we hasten maturity of a crop from a week to 10 days.

PEPPER HARRIS EARLY GIANT (60 days)

Extra early, only a few days later than Harris Early. Fruit 5 in. long, 3½ in. through, green at first, turning scarlet when ripe, mild and sweet. Pkt. 10c; oz. 40c; lb. \$3.60.

EARLY GIANT NEAPOLITAN (60 days)

Produces on short plants not over 20 inches tall a heavy crop of sweet, meaty peppers, averaging 4 inches in length and 3 inches in diameter. Two weeks earlier than Ruby King, more productive, and the fruits bigger in size. Pkt. 10c; oz. 40c; lb. \$4.00, prepaid.

PEPPER GROWERS—Please note that Pepper Ey Giant Neapolitan and Harris Early Giant are unsuitable for Florida and the extreme South. Both varieties are excellent for an early crop in the North.

PEPPER CALIFORNIA WONDER (75 days)

New, medium early variety, producing from 5 to 9 square shaped fruits per plant, 4½ inches long and 4 inches through, with flesh over ¼ inch in thickness. The fruits are dark green turning to bright crimson when ripe, remarkably smooth. The immensely thick flesh is tender, crisp, sweet without trace of pungency and it is not unusual to find specimens weighing a full pound. A valuable shipping variety and of all peppers the meatiest. Pkt. 10c; oz. 50c; lb. \$6.00.

PEPPER EARLY GEM (54 days)

Same as Harris Earliest. The name of Ey Gem is used to avoid mistakes in filling orders. Please order under the name of Early Gem.

Extra early and a paying sort as it ripens ahead of other peppers. The peppers are rather small but the plants are covered with bright red fruit which you can harvest by lifting the bush, picking it clean and rush the peppers to market at a time when the less progressive growers have no red peppers at all. Can be planted closer together as the bushes are dwarf and compact. Bell shaped, 3½ inches long, sweet. Pkt. 10c; oz. 40c; lb. \$3.80.

SWEET TOMATO PEPPER Same in shape as Tomato or Squash Pepper but not hot. It is a thick meaty sweet pepper that ripens early. Popular with many that eat it raw in salads, etc. In our locality it is sometimes called Pimento pepper an entirely different variety. See description Pimento or Perfection Pepper. Pkt. 10c; oz. 60c. (73 days).

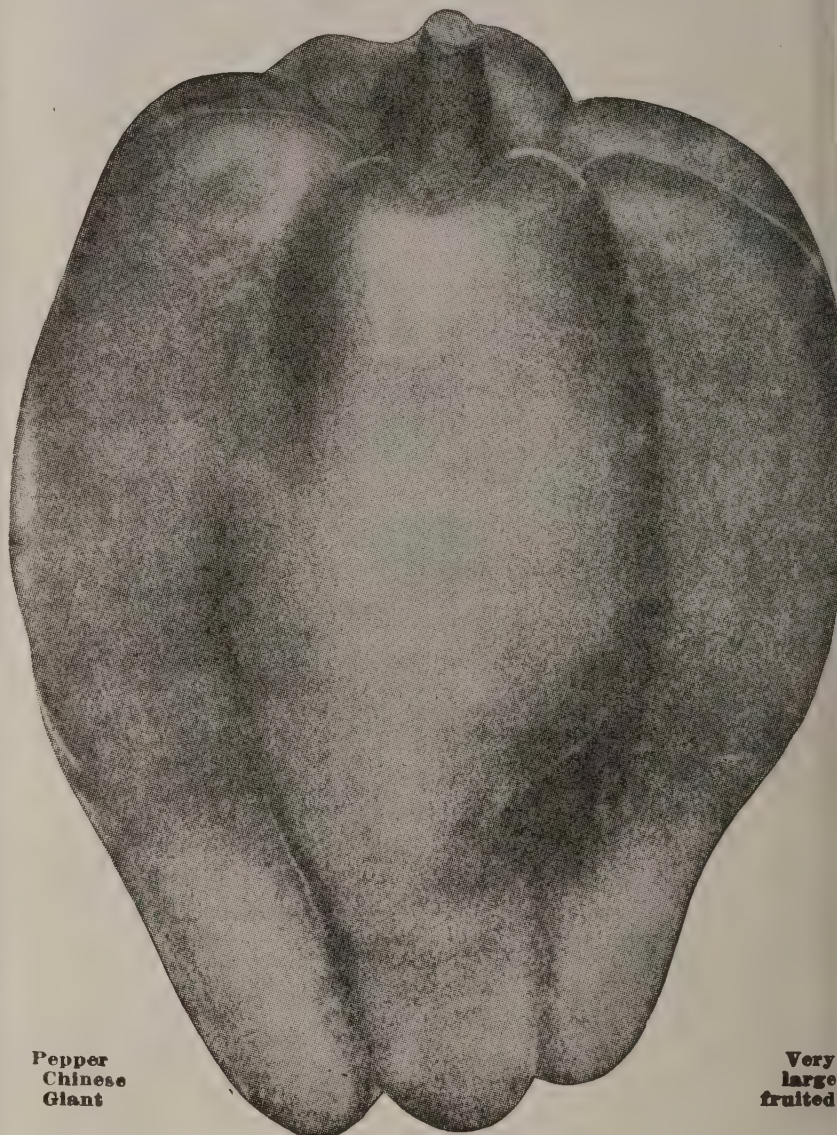
KING OF THE NORTH (57 days)—Fruits brilliant red when ripe, 5 to 6 inches long, 3 to 4 inches across, flesh thick, firm, mild and sweet. Can be raised with less heat than is the rule, indicating that King of the North will stand more cold and unfavorable weather than other peppers. Plants of spreading habit, producing an enormous crop of fruit. Sells well for the first few days before larger and thicker meaty peppers of later maturity reach the market. Pkt. 10c; oz. 50c; lb. \$4.00.

OZARK GIANT (60 days)—Fruit very large, fairly thick-fleshed almost 100% four lobed, smooth, shiny, dark green, highly attractive. Pkt. 10c; oz. 60c.

ROUMANIAN WAX (57 days)—Fruit, bell shaped, thick meaty of bright glossy pale yellow color that holds for a long time before it turns scarlet at maturity. Size of fruit, 4 inches long and 3 inches through; 3 to 4 lobed, mildly pungent. Plants erect 3 feet tall, heavily productive. Pkt. 10c; oz. 60c; lb. \$6.00.

Peppers

Days: From setting of plants to picking.



Pepper
Chinese
Giant

Very
large
fruited

ANAHEIM CHILI (80 days)—Bears in abundance of slightly pungent peppers, six inches long, about an inch at the stem tapering to a blunt point, very attractive. Color brilliant scarlet. Pkt. 10c; oz. 40c; ¼ lb. \$1.00; lb. \$4.00.

BULL NOSE OR LARGE BELL (55 days)

This earliest pepper of the "bell" type is a combination of both Hot and Sweet. The ribs are quite pungent, while the rest of the fruit is mild. The medium sized, square fruits are deep green when immature and scarlet when ripe. Our stock is superior in uniformity of size, shape and earliness. Pkt. 10c; oz. 40c; lb. \$4.00.

LONG SLIM RED CAYENNE (70 days)—Pods pointed 5 in. long, half inch wide, easily dried for winter use. Very hot. Pkt. 10c; oz. 40c; lb. \$4.00.

LONG THICK RED CAYENNE (70 days)—Same as Finger or Long Hot. Pods seven inches long, inch wide, smooth, considerably meatier than Slim Cayenne and not quite as hot. Pkt. 10c; oz. 40c; lb. \$4.00.

CAYENNE LONG THICK YELLOW (66 days)—Same as Hungarian Wax, Bulgarian and Banana pepper. Fruit straight, pointed, green turning to yellow when developed and to crimson when fully matured. Pkt. 10c; oz. 40c; lb. \$4.00.

IMPROVED THICK LONG RED (50 days)—Fruit four inches long and an inch through, pointed, smooth, very hot. Dark green turning into bright red when ripe. Pkt. 10c; oz. 45c; lb. \$3.00.

CHINESE GIANT (80 days)—Very large mild fruited variety. Quite late and a shy bearer. Pkt. 10c; oz. 40c; lb. \$4.00.

NEAPOLITAN (60 days)—Very early and heavily productive. An upright growing variety. Fruit green at first, scarlet when ripe. Pkt. 10c; 1 oz. 40c; 1 lb. \$4.00.

PIMENTO OR PERFECTION (83 days)—The fruits are perfectly smooth, very thick meaty and very mild. Ripens late. In our locality it does not redden up and is caught by frost while the peppers are still green. See description Sweet Tomato Pepper. That may be the pepper you want. Pkt. 10c; 1 oz. 40c; lb. \$4.00.

RED CHILI (82 days)—Fruit small, pointed, bright scarlet and quite hot. Pkt. 10c; 1 oz. 40c; 1 lb. \$4.00.

RUBY GIANT (75 days)—Large fruit of Ruby King type, early and productive. Pkt. 10c; oz. 40c; lb. \$4.00.

RUBY KING (69 days)—Early, fruit large, flesh thick and sweet. Pkt. 10c; 1 oz. 20c; 1 lb. \$2.80.

TABASCO (90 days)—The hottest of all peppers. Fruit small, tapering, smooth. Color greenish yellow, turning to scarlet when ripe. Pkt. 10c; oz. 40c; lb. \$4.00.

WORLD BEATER (74 days)—An early and large sweet pepper, green at first, red when ripe. A fine variety. Pkt. 10c; oz. 40c; ¼ lb. \$1.00.

NEW PEPPER GOLIATH (66 days)

HEAVILY PRODUCTIVE—EARLY—FRUITS LARGE

Fruits of mammoth size, averaging 5 inches in length and 3½ inches in width at both ends. Fully as early as Ruby King and very productive, some plants producing as high as 32 marketable peppers. The fruit is green at first and later turns to a beautiful shade of scarlet. Flesh is thick and sweet and keeps in prime condition for a long time.

Grow Goliath Peppers For Market

We assure you that there will be no time when you will have to take unsold peppers back home. GOLIATH PEPPER will sell itself and you will not have enough to supply the demand. That is our experience. GOLIATH PEPPER is unlike all other peppers, it is a real wonder, it is immense, a great surprise. We grow GOLIATH PEPPER on our seed farm and many market gardeners from our city and Omaha went through our field of GOLIATH PEPPERS. Were they surprised by the sight? Judge yourself. One said: "This is the most wonderful and largest pepper I have ever seen." Said another: "I have never seen so many big peppers on a plant," Says a third: "DeGiorgi, you have a most wonderful pepper, something that will make money for all gardeners that will plant it."

GOLIATH PEPPER will give at least double the returns from an acre over other varieties, because it yields more than twice as heavy a crop and because it brings double the price common peppers do.

So very valuable is GOLIATH PEPPER that many of our customers who have been growing it before are saving their own seed, as they do not want to take the chances of us having a crop failure. They know that if they should be unable to procure the seed of GOLIATH PEPPER it would mean a big loss to them.

All gardeners that have seen our crop of Peppers for seed were surprised by the sight and all asked us to save some seed for them. We showed GOLIATH PEPPERS to the owner of the largest and finest grocery store in our city. He did not believe his eyes and when told we grew those peppers right here on our farm he showed signs that he did not believe us. "No," says he, "these peppers were shipped to you from somewhere, do not tell me that peppers like that can be grown here in Iowa." Well, we showed him our field and he now believes. We say about our GOLIATH PEPPER: At a single picking you will get from a single plant 10 or more most beautiful and largest peppers you have ever seen. The peppers are so large that it is impossible to put more than 20 peppers in a market basket of one-third bushel capacity. It beats Chinese Giant or any other pepper in size. It is sweet as an apple, thick meated and VERY EARLY. Place your order NOW. Pkt. 15c; 1 oz. 50c; ¼ lb. \$1.50; lb. \$6.00.

PEPPER EARLY CALWONDER (63 days)

An early strain of California Wonder maturing a week to ten days ahead of regular stocks. Plant dwarf, vigorous, heavily productive. Fruits 3 to 4 lobed, upright, very attractive, smooth, uniform, deep green, changing to bright crimson at maturity. Thick, sweet and mild. Particularly desirable in areas of shorter season. Pkt. 10c; oz. 60c; lb. \$6.00.

EARLY PIMENTO (65 days)—Fruit of the same shape and high quality as the regular Pimento and only a trifle smaller in size. The ripe peppers are of highly attractive dark crimson color. Very heavily productive. Pkt. 10c; oz. 80c.

GOLDEN KING (78 days)—The largest fruited bell shaped yellow colored pepper. Smooth, flesh sweet and mild. Pkt. 10c; oz. 50c; lb. \$6.00.

LARGE RED CHERRY (82 days)—Fruit a flattened globe, smooth 1½ to 2 inches in diameter. Very hot. Pkt. 10c; oz. 40c; lb. \$4.00.

SMALL RED CHERRY (80 days)—Fruit small, the size of common cherry, red when ripe and very hot. Pkt. 10c; oz. 40c; lb. \$4.00.

PAPRIKA PEPPER (70 days)

Long grown in Europe but very little known in the United States. It is a variety producing a heavy crop of long, tapered, deep red fruit at maturity with sweet flavor and slight pungency in ribs and seeds. In other words it is a pepper that is only slightly hot with pleasant flavor and for that reason desirable for the preparation of savory stews and gravies as well as for eating raw or pickled. Pkt. 10c; oz. 60c.



GOLIATH PEPPER makes large sturdy plants and should be allowed more space than common varieties. We plant 30 inches apart each way. To get fruit of exceptionally large size grow on rich ground where no peppers were grown the year before and do not let your plants suffer for lack of moisture.

WHICH IS THE BEST PEPPER?

The best paying large sweet bell pepper is still the variety Goliath. It does well in every part of the country, especially so in Florida. Harris' Early Giant is another real good early pepper but we do not recommend it for the South where it proved to be a shy cropper. Much is heard about Ozark Giant and Calwonder pepper. Both these varieties are high class and every market gardener should give these two peppers a trial. The most popular hot pepper is the variety Improved Thick Long Red.

CULTURE—1 oz. of seed will produce about 2,000 plants; 6 ozs. plants an acre. The culture of the peppers is similar to Egg Plant. Have the plants in hot beds 3x3 inches and in the field in rows 3 feet apart and 18 inches apart in the rows. Pepper requires very rich soil in order to develop fruit of large size.

Rhubarb

CULTURE—1 oz. for 100 feet of row. Sow in rows 18 inches apart and thin to 6 inches apart in the row. The following spring set out your roots in rows 4 feet apart and 3 feet apart in the rows. Rhubarb requires very rich soil. To get a full stand press the seeds into the ground firmly, cover the seed inch deep.

SHOULD THE SEED STALKS BE CUT OUT—They should to encourage the leaf growth and the development of the roots.

FORCING RHUBARB—This is profitable. If you have room under benches, plant the rhubarb. No attention necessary except watering. Only heavy roots full of life are suited for forcing. Dig up in the fall, pile up, cover lightly with soil and allow to freeze before planting under the benches. Early in spring dig the roots and plant back in the field.

VICTORIA—Choice strain with heavy deep red stalks. Pkt. 5c; oz. 10c; ¼ lb. 30c; 1 lb. \$1.30; 10 lbs. \$11.00.

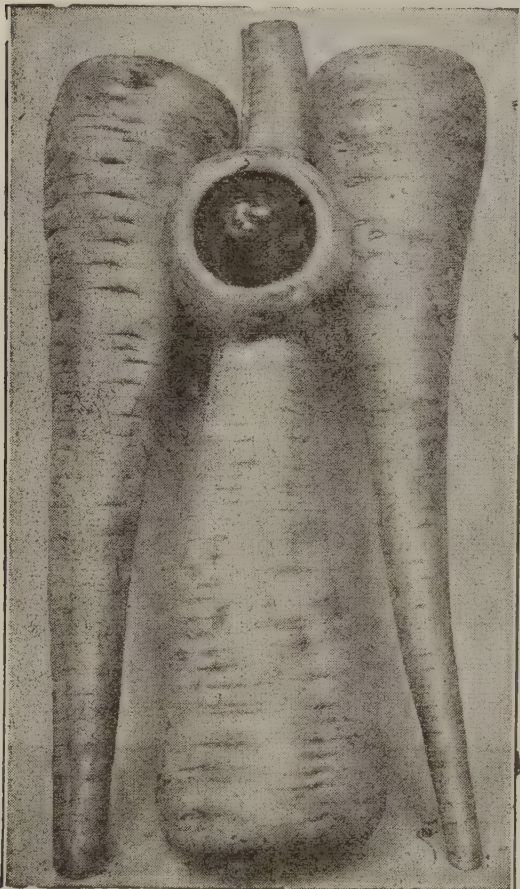
McDONALD CRIMSON—Produces heavy, long stalks of crimson color from early spring till frost. Absolutely no green stalks. Heavy roots, 10 for \$2.00, lighter roots 10 for \$1.50, not prepaid.

Parsnip

CULTURE—1 oz. to 100 feet of row (3 lbs. to the acre.

Parsnip is very hard to germinate. To insure success sow either in the fall or very early in the spring while the ground is moist. The seed of parsnip is very light and if it happens that a hard crust is formed on the ground the young and feeble plants, instead of pushing through the crust run underneath and suffocate. To overcome this difficulty use a wheel hoe in loosening the crust. Set your knives so that they turn out. Through the cracks and crevices the young plants will make their way. Have the rows 18 inches apart and thin to 4 inches apart in the rows, cover the seed half an inch deep and press the soil well to insure better germination. It is a good plan to sow radishes or lettuce with parsnip seed and thus loosen the ground for the weak and tender parsnip plants.

Try sowing parsnip seeds with some radish seeds. Radish has vigorous sprouts that break up the hard top crust and if there is enough moisture in the ground, you will get a perfect stand of parsnip that way, in the incredible short time of from 4 to 5 days.



Parsnip Hollow Crown

HOLLOW CROWN (95 days)—Long, smooth, heavy roots, tender and sweet. Our strain is a good selection. Pkt. 5c; oz. 10c; 1 lb. \$1.20, prepaid.

PREMIUM PARSNIP (80 days)—The roots are less than two-thirds as long as those of Hollow Crown. At the same time it yields heavier, is easily pulled. A grand sort. Pkt. 5c; oz. 10c; 1 lb. \$1.20; 10 lbs. \$11.00, prepaid.

Sage Broad Leaved

An annual kitchen herb much used for seasoning. Sow the seed early in the spring. In the North protect by light covering of dry straw or hay. Hardy in the South without protection. Height about 15 inches. Pkt. 15c.

We sell half and quarter pounds at pound rate, 5 pounds or over at 10 pound rate, 25 pounds or over at 100 pound rate,

Pumpkin

CULTURE—1 oz. for about 15 to 30 hills, 3 to 5 lbs. per acre, depending on variety, whether small or large seeded.



Japanese Pie Pumpkin

About Pumpkins

Can be easily grown in corn or potatoes. If planted by itself in hills 6 by 4 feet. Give frequent but shallow cultivation until the vines cover the ground. Rich moist soil is the best for pumpkins.

The biggest of all is the King of Mammoths and it is the best variety to grow for exhibition purposes. Winter Queen has the most delicately flavored flesh and it is the best variety to grow for the table. Large Cheese is a sort from which you will get the most good because it is the most solid fleshed of all pumpkins, a heavy yielder of good eating quality, keeps for a long time and if you should happen to have surplus you may store it away without fear of it spoiling or it may be sold to canning factories or stores.

Sugar Pie is extra sweet fleshed and extra good for pie making. Striped Cushaw because heavily productive, out yielding other varieties in tonnage and because of really good quality, is gaining in favor.

KING OF GIANTS (120 days)—On rich ground and given plenty of room (one plant to a hill) will reach enormous proportions, specimens have been grown as large as 200 pounds. Although very big it is of high quality. Pkt. 10c; oz. 15c; lb. \$1.40.

PUMPKIN WHITE CUSHAW (112 days)—Fruit crook-necked, creamy white, thick-fleshed, of high quality. Heavily productive. It is sometimes called Trombone or Jonathan. Average weight 10 lbs. Pkt. 5c; oz. 15c; lb. \$1.20.

PUMPKIN STRIPED CUSHAW (115 days)—A superior variety of fine appearance, rind white, mottled in a distinct way with green. One of the most popular sorts for pies, baking and feeding. It is a heavily productive sort. The flesh is yellow, fine grained, solid, sweet and of fine quality. Average weight 12 lbs. Pkt. 10c; oz. 15c; lb. \$1.20.

CONNECTICUT FIELD (120 days)—Almost round, orange yellow, heavily productive. Pkt. 5c; oz. 10c; 1 lb. \$1.00, prepaid.

LARGE CHEESE (110 days)—Flat like a cheese box. Very meaty, sweet and of fine flavor and keeps well. Color buff. Pkt. 5c; oz. 10c; 1 lb. \$1.00, prepaid.

SUGAR PIE (110 days)—Small flat fruit of the very finest flavor of all pumpkins. Pkt. 10c; oz. 15c; 1 lb. \$1.20.

WINTER QUEEN OR LUXURY (110 days)—Of very high quality and of all pumpkins the best keeper. Of medium size. Skin yellow, closely netted. Pkt. 10c; oz. 15c; 1 lb. \$1.20.

JAPANESE PIE PUMPKIN (115 days)—In shape crook-necked, sometimes bottle-necked, skin dark green, sometimes striped light green. The seeds are all in the blossom end, the neck being solid flesh, that is sweet, dry, mealy, therefore a popular variety. Average weight 12 lbs. Pkt. 10c; oz. 15c; lb. \$1.20.

PUMPKIN—A vegetable of the highest value. Nourishing, tasty, inexpensively raised, easily stored.

Peanuts

Can be grown anywhere on either light or heavy soil wherever common corn is successfully raised. Grown on light sandy soil the peanuts have bright clean hull and sell better on the market than when grown in black soil from which the nuts come with not so bright and clean hull. This however does not affect the quality of the shelled nuts. Plant late in May and early in June, cover the seed on heavy soils one inch deep and two inches deep on light soils. Avoid freshly manured ground. Under favorable growing conditions the yield per acre is 2000 lbs. You will get full and absolutely free information on peanut culture if you will write to: Department of Agriculture, Washington, D. C.



IMPROVED SPANISH PEANUTS—Bunch type and the earliest maturing peanut producing larger nuts, superior in sweetness and flavor and a heavier yield than ordinary Spanish. To obtain highest yield plant 6 inches apart in 18 inch rows. Use 30 lbs. of shelled nuts to plant an acre. You will need 40 lbs. of unshelled peanuts. Our nuts are not shelled. By mail postpaid: Pkt. 10c; 1 lb. 45c. Not prepaid: 10 lbs. \$3.50.

VIRGINIA PEANUTS—Of all bunch peanuts, Virginia Bunch Peanut produces largest nuts of superior quality a week earlier than the regular Virginia Jumbo, which is a running variety. Generally grown for the market producing bright large nuts especially on light and sandy soils. Price the same as for Improved Spanish Peanuts.

Our Radish Seed is far Northern Grown producing radishes earlier than is the case when using seed grown further South. Our seed is produced from selected transplanted roots. The radishes for our seed crop are dug up, sorted out by men of experience and only roots of perfect shape, bright and clear colored with slender tap roots are planted back for the production of seed.

Radishes

CULTURE—1 oz. for 100 feet of row; 12 lbs. per acre.

Sow as soon as the ground is open, on fairly rich soil to induce quick growth and roots of good quality. Have the rows 12 inches apart and thin out to 2 inches apart in the row. Radishes can be grown throughout the growing season provided you have the moisture. Whenever radishes suffer from lack of moisture or the absence of nourishment in the ground the roots will be mis-shapen and of poor color and very strong in taste. They must be brought to maturity quickly in order to be of good quality. Winter Radishes should be sown about August 1st; if sown earlier they become of excessive size and are pithy.

It is important to cover the seed of all early round radishes with one half and not over three-fourths of an inch deep. Seed covered an inch or more as well as seed covered one-fourth inch or less produces imperfectly formed roots. If you doubt this cover the seed of early round radishes at different depths using identical lot of seed. You will find that seed covered one-half inch produces roots of perfect shape.

Which Is The Best Radish?

PERFECTION WHITE TIP the most popular. Of the long varieties, **ICICLE** is the most tender and least pungent. The best summer variety is **WHITE STRASSBURG** and the finest winter radish is **CALIFORNIA MAMMOTH WHITE**.

RADISH MAGDEBURG stays mild and sweet even in mid-summer provided it is not permitted to suffer too much from lack of moisture. Magdeburg is the highest quality radish now in existence.

GIANT BUTTER—This variety is a few days later in maturing than the earliest sorts but when it is ready you will pull Radishes which will be a real delight to you.

SCARLET GLOBE SPECIAL (25 days)

A highly colored and very attractive variety for out of door culture, forcing under glass or for shipping. Tops small, ideal for bunching. Roots slightly elongated globe (so called "broad olive" shape) of bright, almost true scarlet color. Pkt. 5c; oz. 10c; lb. \$1.00, prepaid.



PERFECTION WHITE TIP (26 days)

Perfection White Tip Radish is of a very attractive appearance, half of the root being of sparkling scarlet, and the lower half being pure snow-white. It is perfectly round and smooth, and very uniform in size. The quality is excellent, mild, crisp, tender and never pithy. Pkt. 5c; oz. 10c; 1 lb. \$1.00, prepaid.

WHITE TIP SPARKLER (26 days) A highly developed globe shaped, white tipped variety, of high quality and fine appearance. 1 lb. \$1.00; ¼ lb. 25c; 1 oz. 10c; Pkt. 5c, prepaid.

RADISH WHITE BALL (25 days)

Same as White Pearl. The best early round white radish. Uniform in size, smooth skin, glistening white flesh, crisp and sweet. Never gets pithy. Pkt. 5c; oz. 10c.

CRIMSON GIANT (29 days)

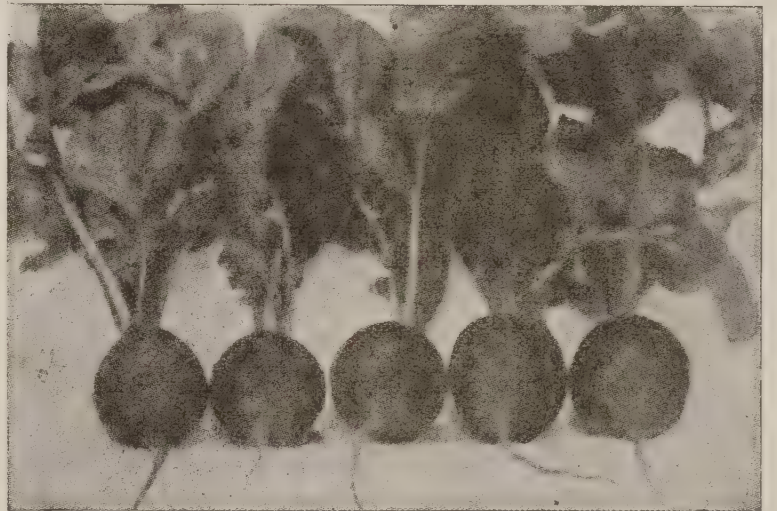
Roots large, round to oval in shape, of vivid scarlet, the flesh white, sweet and mild. Medium early. Specimens when not planted too close grow to the size of medium sized apples, and still are most tender and sweet. Pkt. 5c; oz. 10c; ¼ lb. 25c; 1 lb. \$1.00, prepaid.

We sell half and quarter pounds at pound rate, 5 pounds or over at 10 pound rate, 25 pounds or over at 100 pound rate.



GIANT BUTTER RADISH (29 days)

The largest globe shaped early red radish of high quality. Ready for market in from 4 to 5 weeks, remaining solid, crisp and sweet for a long time. Pkt. 5c; oz. 10c; ¼ lb. 25c; lb. \$1.00, prepaid.



EARLY SCARLET GLOBE (25 days)

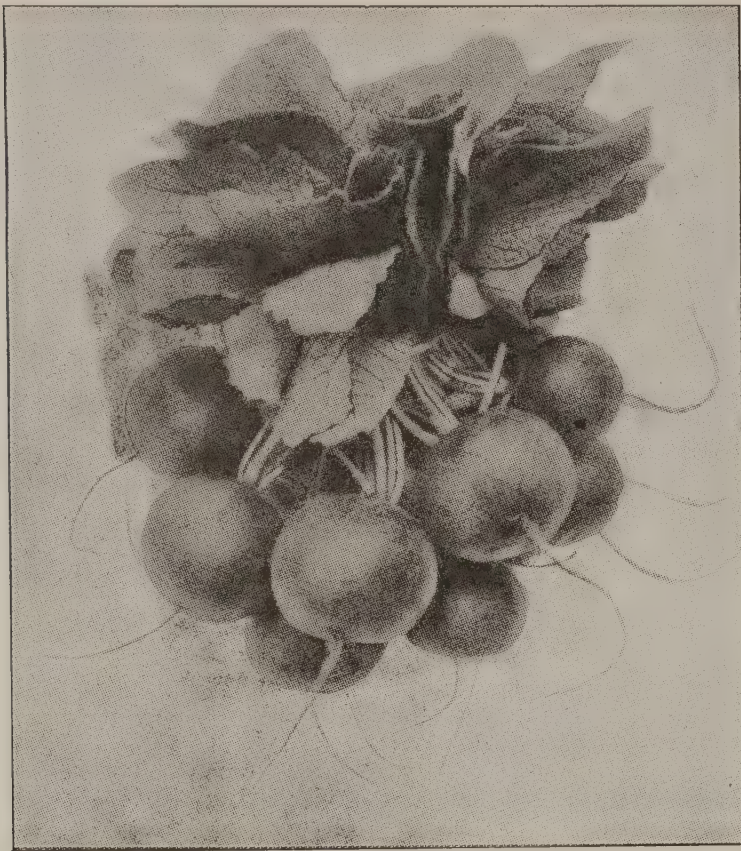
The roots are globular, bright red, flesh pure white, tender, always mild and sweet. A very neat strain bred especially for use of market growers. The tops are bright green, medium tall just right for making attractive bunches. At present this is the best early globe shaped radish to raise for the market. Pkt. 5c; oz. 10c; lb. \$1.00; 10 lbs. \$9.00, prepaid.

Sorrel

Sow in drills 18 inches apart, early in the spring, thin out to 6 inches apart in the row, keep the flower stems cut off as they appear. The first crop of leaves is ready 60 days from date of sowing. The plants continue in full bearing for 4 to 5 years. An excellent vegetable prepared for the table like spinach, also used as a salad. Or cooked with spinach, one-third sorrel and two-thirds spinach.

MAMOTH LYON SORREL—New. Produces large and broad, massive, tender leaves mildly flavored of pale green color. Pkt. 10c; oz. 30c; lb. \$3.00.

NARROW LEAF SORREL—(Silver Leaf). True Long Island strain of superior quality grown extensively for the New York market. Pkt. 10c; oz. 30c; lb. \$3.00.



RADISH SAXA (22 days)

Saxa is a bright, deep red globe shaped radish with small tops and makes well developed, full sized roots in three weeks from the date of sowing. Pkt. 5c; oz. 10c; lb. \$1.00, prepaid.



RADISH MAGDEBURG (24 days)

Market Gardeners! This new radish will sell on any market and we believe that the returns will be better than is the rule. Early Magdeburg will sell fast because it is a beauty in looks and the quality is as good as the "looks." The radishes are inch and half long, about half inch through, flesh sweet and mild, skin the brightest imaginable deep scarlet. Very inviting in appearance and no buyer after tasting the radish will care much for other radishes as long as Early Magdeburg radish will be available. The roots run uniform like peas in a pod almost. The tops are medium short, ample for tying in bunches. We also recommend Magdeburg radish for forcing under glass. Pkt. 5c; oz. 15c; lb. \$1.20; 5 lbs. \$5.00.

White Strassburg Radish (39 days)

Remains mild and sweet even in midsummer. It resembles the Icicle in shape, but its roots are larger and not as brittle as those of the Icicle. This is an advantage because the roots of the White Strassburg will not break as easily as those of the Icicle when washing. Both flesh and skin are pure snow-white. It is always very saleable. Any gardener that is not growing White Strassburg is missing a good thing. Pkt. 5c; oz. 10c; ¼ lb. 25c; lb. \$1.00, prepaid.

CALIFORNIA MAMMOTH WHITE (60 days)—A winter radish of very attractive appearance with long, large, pure white roots of excellent quality.

EARLY SCARLET GLOBE FORCING (25 days)—Roots globular. Quality very high.

FRENCH BREAKFAST (27 days)—An oval-shaped radish of deep scarlet, with a slight white tip. Early and of high quality.

LONG BLACK SPANISH (60 days)—A winter variety with cylindrical roots 7 to 10 inches long, skin black, flesh white.

ROSE OR SCARLET CHINA (60 days)—A winter variety with bright rose colored roots about 6 inches long. Quality good.

ROUND BLACK SPANISH (56 days)—Large round roots, skin black, flesh white, quality good.

VICK'S SCARLET GLOBE (25 days)—Extra select stock.

WHITE BOX (30 days)—Skin smooth, ivory white, flesh pure white, somewhat pungent, firm and crisp. Can be pulled quite early, before fully matured.

PRICE—All radishes listed on this page 5c per pkt.; 10c per oz.; \$1.00 per lb., prepaid.

WINTER RADISH BLACK LUXURY (55 days)

Top-shaped, three to four inches in diameter and three and one-half inches long. Flesh white, mild, sweet, of very highest quality, much better than other winter radishes. A very superior new variety. Pkt. 5c; oz. 10c; 1 lb. \$1.00.



EARLY ICICLE RADISH (27 days)

The roots are long, plump, smooth and of attractive appearance, the flesh pure white, brittle and mild flavored. Pkt. 5c; oz. 10c; ¼ lb. 25c; lb. \$1.00, prepaid.

Spinach—Specialty

You need 1 oz. of seed to sow a row 100 feet long, 12 lbs. per acre if drilled or 15 lbs. if broadcasted. Sow early in the spring as soon as the ground is open. If you will sow in August you will get a crop in September. To winter over, sow early in September and protect the planting by covering with straw after the ground freezes up. Many gardeners sow their spinach for early spring any time during the winter, provided the ground is in shape, as it is almost every winter during a mild spell of weather.

WHICH SPINACH IS BEST?—There are two types of spinach. The savoyed and the so-called smooth leaved. New Zealand spinach is the third type and is good only during the hot weather when regular spinach is out of question. Of the savoyed spinaches the best for an early crop is Bloomsdale and if smooth leaved spinach is wanted the best variety is Big Crop. Where the ground is infested with disease use Virginia Savoy, a disease-resistant variety. New Zealand spinach is not easy to sell at first but the buyers soon find out that it has not the dirt like common spinach, is just as good to eat and your spinach will be in demand. Then too, it can be had during hot weather when regular spinach cannot be had.



GIANT FILL BASKET SPINACH (40 days)

Early and Very Large

Produces plants often measuring 25 inches across, and has a quantity of thick, succulent leaves in the center resembling a half developed head of lettuce. The leaves are of dark glossy green color, notably thick in texture, moderately crumpled. It cooks very tender, is of excellent flavor. Pkt. 5c; oz. 10c; lb. 60c; 10 lbs. \$4.80, prepaid.

LONG STANDING BLOOMSDALE (39 days)

Exactly the same thing as the old reliable Bloomsdale. Its value lays in the fact that it will stand longer before bolting to seed. Oz. 10c; lb. 60c; 10 lbs. \$4.80, prepaid.

PERFECTED BLOOMSDALE No. 5 (35 days)

The best type of Bloomsdale Spinach in existence. Of compact growth, extra curled, the leaves very dark green, glossy and substantial, giving this variety highest qualities as a shipper. Will stand longer without bolting to seed than any spinach known. Oz. 10c; lb. 60c; 10 lbs. \$4.80, prepaid.



Field of Select Bloomsdale Spinach

BLOOMSDALE SPINACH (39 days)

The leaves are thick twisted and crumpled, giving them, when ready to ship, an elasticity, adapting them for transportation to long distances and at the same time giving the crop large measuring qualities. What we offer is the genuine true Bloomsdale. 1 lb. 60c; 1 oz. 10c; 10 lbs. \$4.80, prepaid.

NEW SPINACH BIG CROP (40 days)

Long Standing—Disease Resistant—Enormous in Size

Big Crop Spinach produces almost twice as big a crop as the next best variety. Very early, very hardy and stands two weeks longer than Bloomsdale before shooting to seed. The leaves are borne on long, stout stalks, well above the ground, staying clean and free of dirt. They are thick, very large, rounded at the edges, twice as long as they are broad, moderately crumpled. Color bright green. Blight and wilt resistant. Of all so-called smooth leaved varieties such as Viroflay, Thick Leaf, Flanders, etc., Big Crop Spinach is the best and unbeatable for canning purposes and for a tremendous crop. Oz. 10c; lb. 60c; 10 lbs. \$4.80, prepaid.

BLIGHT RESISTANT SPINACH (39 days)

Virginia Savoy Blight Resistant, introduced by the Va. Truck Experiment Station at Norfolk, Va. of Bloomsdale type, heavily crumpled with massive thick leaves. Highly blight resistant. Oz. 10c; lb. 60c; 10 lbs., \$4.80, prepaid.

We sell half pounds at pound rate, 5 pounds or over at 10 pound rate, 25 pounds or over at 100 pound rate.



NEW ZEALAND SPINACH (70 days)

Produces a crop of greens, closely approaching the true spinach in flavor, from June to frost. Soak the seed in water for 24 hours. Plant 3 seeds to each 3 inch pot, thin out to one plant to each pot. Plant outdoors when all danger of frost is past, spacing the plants at least 2 feet apart. Start the seed in April. Many will not bother planting spinach in pots (the idea). A good reason why you should. There will be no oversupply on the market, you will get paid for all your extra work. One plant of N. Z. Spinach well grown produces as much as one peck of greens at one picking. The plants continue in production from June to frost. The shoots and leaves of N. Z. Spinach are fleshy and thick, very tender, delicious when cooked. For a maximum crop use fresh manure liberally. Pkt. 10c; oz. 20c; lb. \$2.00.

NEW ZEALAND SPINACH is such a "swell" dish that many people like it better than meat, if prepared as follows:

Brown slightly, sliced onion, in butter, add spinach cut up in pieces, add very little water, stew on a slow fire under cover for ten minutes. Season with salt and pepper.

Squashes

CULTURE—1 oz. for 20 to 40 hills, 4 to 6 lbs. to one acre, depending on the variety whether small or large seeded.

Squash does best on heavy well manured and moist soil. Plant about May 10th. To escape the ravages of stink bugs in our locality the growers delay planting and plant squash between June 20th and July 1st in hills 3 by 4 feet, dropping 5 seeds in each hill. The winter varieties, like Hubbard, require more room and the hills should be 8 by 6 feet. Cultivate often but shallow.

SUMMER SQUASH

ENGLISH VEGETABLE MARROW (56 days)—Large, white oblong fruit, striped light green. A most delicious vegetable. Pkt. 5c; oz. 15c; 1 lb. \$1.40, prepaid.

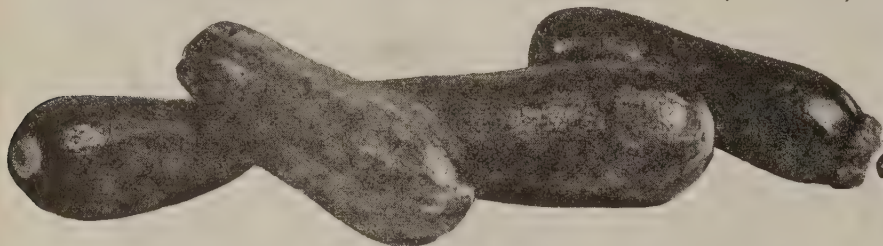
GIANT SUMMER CROOKNECK (55 days)—Fruit rich yellow, thickly warted. Of dwarf bush habit, heavily productive. Pkt. 5c; oz. 15c; 1 lb. \$1.20, prepaid.

EARLY SUMMER CROOKNECK (48 days)—A week earlier but not as big as Giant Summer Crookneck, exceedingly prolific. A fine and very popular variety. Pkt. 5c; oz. 15c; 1 lb. \$1.20.

EARLY WHITE BUSH (52 days) White Patty Pan. A productive bush variety, fruit rounded, creamy white, scalloped, about 10 inches in diameter. Pkt. 5c; oz. 15c; 1 lb. \$1.20, prepaid.

EARLY PROLIFIC STRAIGHTNECK (50 days)—Smaller and considerably less warted than Giant Straightneck. Lemon yellow in color. Very uniform in shape and size, very heavily productive producing fruit over a long period of time. Sells well on the market. Pkt. 5c; oz. 15c; 1 lb. \$1.20.

GIANT STRAIGHTNECK (55 days)—Is the same as Giant Crookneck but without the curved neck. Pkt. 5c; oz. 15c;



COCOZELLA VARIETIES

Cocozella squashes, also known as Italian Vegetable Marrow, are a distinct type, the fruit highly flavored and tasty. Consumed when well developed or in their baby stage, rightly prepared for the table, Cocozella squash is a first rate delicacy. The most widely grown is the Gray Zucchini, Black Zucchini is the earliest, Green Cocozella is favored by the French and Italians. All Cocozellas offered by us are bush, not vining.

GRAY ZUCCHINI (60 days)—Fruit foot long, four inches through when well developed, dark green mottled with light green.

BLACK ZUCCHINI (52 days)—Well developed fruit, 14 inches long, four inches through, black-green when young.

GREEN COCOZELLA (60 days)—Fruit 16 inches long, four inches through, deep green when young, ripening with alternate stripes of green and gold.

ANY VARIETY OF COCOZELLA: Pkt. 5c; oz. 15c; 1 lb. \$1.40.

SPAGHETTI SQUASH (60 days)

When ripe this squash is white-skinned 8 in. long and 4 in. through. Boil the whole squash for 20 minutes then take out of water, cut open and place the mass of spaghetti-like strands on a dish. Seasoned with salt, pepper and butter will be found truly delicious. Stored in a dry frostproof place Spaghetti Squash keeps in prime condition for several months. Pkt. 10c; oz. 15c; 1 lb. \$1.40, prepaid.

BUTTERCUP (100 days)—Of attractive turban shape, 6½ in. across, 4½ in. through with the seeds centered in the blossom end. Flesh thick, deep orange, sweet, dry; of very pleasing flavor, in fact the smoothest, best flavored squash now in existence. Rind thin, but though dark green, mottled and striped with gray. First rate winter keeper. Pkt. 10c; oz. 20c; 1 lb. \$1.60.

WINTER SQUASH TABLE QUEEN OR ACORN (58 days)

After many years of effort, we finally are rewarded and offer perfectly fixed seed producing nothing but dark green Fruit of uniform size of unequaled quality. Pkt. 5c; oz. 15c; 1 lb. \$1.40.



CHICAGO HUBBARD (115 days)—Fruit dark green, thickly covered with warts, average weight 16 lbs. Flesh thick, dry, sweet. Fine for sorting. Pkt. 5c; oz. 15c; 1 lb. \$1.80.

BLUE HUBBARD (115 days)—Of bluish-green color, heavily warted, average weight 15 lbs. per fruit. Quality high. Pkt. 5c; oz. 15c; 1 lb. \$1.80.

GOLDEN HUBBARD (105 days)—The color is bright golden, the rind covered with rather coarse warts. Weight per fruit 9 lbs. Pkt. 5c; oz. 15c; 1 lb. \$1.80.



BANANA SQUASH (120 days)

Produces a heavy crop even when other winter squashes fail, owing to diseases or unfavorable weather. The strain we offer is the better strain of two, namely the orange skinned and orange fleshed, a much better strain than the Gray Banana strain. For quality, sweetness of flesh, high flavor, productiveness and high cropping qualities, try our strain of banana. Pkt. 5c; oz. 15c; 1 lb. \$1.80.

GREEN DELICIOUS (115 days)—One of the best for quality. Top shaped, green, striped with a lighter green, rind hard and smooth. Excellent keeper. Pkt. 10c; oz. 20c, prepaid.

GOLDEN DELICIOUS (115 days)—Fruit top shaped of bright red-dish-orange color with deep green tip at blossom end. Flesh thick, golden orange, sweet and extremely dry. High class for canning and storing. Pkt. 10c; oz. 20c.

About Squash Varieties Squash is divided into two broad classes, summer squash or those prepared (as a rule) by slicing, rolling in flour, cracker crumbs, ground parched sweet corn, etc.; and winter squash, which is cut or broken into moderate sized pieces and baked in the oven or made into pies.

If you want a real treat in Summer Squash try COCOZELLA. It is in its prime when about 8 inches long. At this stage they are very tender and sweet and have no hard rind. If prepared like Egg Plant you'll find a dish you'll truly like. The finest flavored and best squash for baking and pies is DELICIOUS; for storing for winter the old standby, HUBBARD, has no superior. Banana is of large size and wherever this feature is particularly desirable it is the sort to plant.

About the handsomest of all squashes is Golden Delicious. Its vivid orange color catches the eye. It also ranks high in quality

We sell half pounds at pound rates, 5 lbs. or over at 10 lb. rate, 25 lbs. or over at 100 lb. rate.

Tomatoes

CULTURE—1 oz. for 4,000 plants.

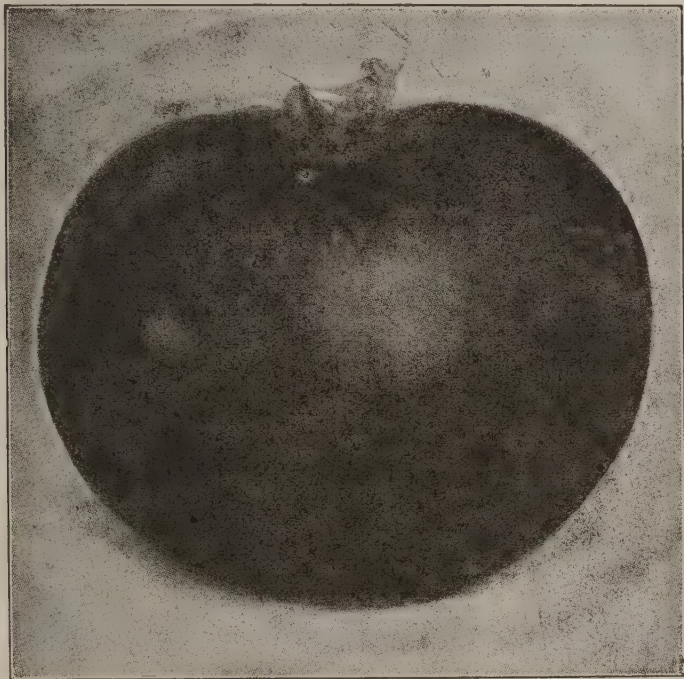
One to two ounces of seed will produce enough plants for one acre.

Sow in hot beds about March 1st, in rows 3 inches apart, transplant when 2 inches high in cold frames. When plants are about 6 inches high set into the field, the early varieties in rows 4 feet apart and 3 feet in the rows and the late varieties, such as Stone or Great Baltimore, 5 feet apart and 4 feet apart in the rows.

In the North it is advisable to tie plants to poles or trellis and prune the vines to some extent, so as to allow all light possible and hasten the crop to maturity. Tomatoes tied to stakes can be as close as two feet apart each way.

Tomatoes will give a heavy crop on any fairly good soil. On freshly manured ground tomatoes make a heavy growth of vines, but the ripening of fruit is retarded. Never plant tomatoes after potatoes as bugs are sure to appear and damage the crop. Read the description of Tomato Earliana.

Number of days: From setting plants to marketable fruits.



Tomato Marvelous Pink Globe

MARVELOUS PINK GLOBE (74 days)

Fruit almost a perfect globe, large in size, solid and meaty, free from acidity, of bright rosy pink color, smooth, remarkably free from cracks around the stem, borne in clusters of 6 to 10. Vines medium heavy, very heavily productive. Because of its high quality and fine appearance, outsells all other pink tomatoes on the market. Pkt. 10c; oz. 40c; lb. \$4.00.

TOMATO BREAK O' DAY (70 days)

Exceptionally resistant to wilt and nail-head rust. Fruits medium large, orange red, uniform, globe-shaped, smooth, walls not as thick as in Marglobe. Plant light, of open spreading habit with medium foliage. Heavily productive. The yellow cast in color and light vine growth are drawbacks to this variety. Pkt. 10c; oz. 40c; lb. \$4.00.

Salsify-Oyster Plant

Also called Vegetable Oyster, forms long, white somewhat mealy roots which are used the same as carrots or parsnips. Breaded and fried in butter it resembles Oysters in taste. Scorzonera or Black Salsify has even finer flavor than common Salsify and the roots are larger. The roots of both may be left in the ground over winter and used in the spring when fresh vegetables are hard to obtain.

MAMMOTH SANDWICH ISLAND—The roots are long, smooth, white in color, of uniform growth, the tops are grassy. Of excellent quality and delicate in flavor. Pkt. 10c; oz. 40c; 1 lb. \$4.00.

SCORZONERA—BLACK SALSIFY—Considered by many better than white salsify. It has a flesh tap-root resembling that of salsify in size and flavor and distinguished from it by the black color of the skin. Very hardy.

SWISS CHARD—See page 16.



TOMATO 100% (76 days)

Large Wilt-Resistant Red—Early, Smooth, Solid

Equally suitable for outside as well as for forcing. Absolutely wilt resistant, in fact 100% so. Proved immune to wilt in the field and under glass produced a splendid crop on clean vines free from wilt in a greenhouse that the year before was full of wilt. Shaped like Bonny Best of larger size, more solid, deep dark red, most attractive in appearance. The vines are of vigorous growth yet without excessive foliage, bearing heavily in clusters of 3 to 5 fruits of uniform size, almost free from culls. Pkt. 10c; oz. 45c.

More Tomatoes

ACME—Second early, fruit large, pink.

BEEFSTEAK (90 days)—Fruit large, flat, scarlet.

BONNY BEST (70 days) Popular for home and market gardens and for growing under glass. Fruit medium sized, round, smooth, bright scarlet, solid and of high quality with tart flavor. Quite productive. Pkt. 10c; oz. 45c; lb. \$5.20.

BEAUTY (84 days)—Second early, fruit large, pink.

DWARF CHAMPION (86 days)—Large fruit, purplish.

DWARF STONE (92 days)—Large fruit, heavy, solid, scarlet.

CHALK'S EARLY JEWEL (73 days)—Bright scarlet, round, smooth.

GOLDEN QUEEN (84 days)—Fine large yellow fruited sort.

GULF STATE (77 days)—An improved Livingston's Globe, a pink tomato.

IMPROVED STONE (86 days)—Late, fruited large, scarlet, solid, meaty, productive, in a word, an excellent sort in every way.

JOHN BAER (72 days)—Extra early, scarlet fruit of medium size.

JUNE PINK (69 days)—Extra early, fruit large, pinkish quality poor.

LIVINGSTONE'S GLOBE (82 days)—Second early, fruit globe shaped, rose pink. True stock.

MATCHLESS (85 days)—Late sort, fruit large, solid, scarlet.

NORTON (88 days)—This is a wilt resistant Improved Stone.

REDHEAD (73 days)—An improvement on Bonny Best.

TREE TOMATO—A name applied to varieties of upright growth such as Dwarf Stone and Dwarf Champion.

ANY ABOVE TOMATO—Pkt. 10c; oz. 45c; lb. \$5.20, postpaid.

VICTOR (68 days)—Fruit round, smooth, scarlet. Does well in the Far North. Pkt. 10c; oz. 60c; lb. \$6.00.

BISON—Fruit scarlet, medium in size almost globe shaped. Ripens very early. The vine is compact so that the plants can be set 2 feet apart in the row without crowding one the other. The crop of fruit is simply immense. With us here in Iowa proved an absolutely worthless variety because the sun cooks the fruit causing it to fall off the vine before it is fully ripe. Far North we have but little doubt that Bison is a good performer. Pkt. 10c; oz. 40c.

TOMATO BOUNTY

Of great value to market growers on account of its earliness, bearing a heavy crop of solid, deep scarlet, smooth, globe shaped, good sized tomatoes (3 to 3½ inches in diameter) a few days ahead of any other variety. It is not a continuous producer, staying in bearing condition only about 6 weeks from date of first picking. Plants rather small of self-topping habit. Can be planted as close as 2 feet apart. Pkt. 10c; oz. 60c; lb. \$6.00.



GREATER BALTIMORE TOMATO (81 days)

VERY LARGE AND HEAVY

BETTER THAN STONE

IMMENSELY PRODUCTIVE

The best red colored main crop variety, as well as for canning purposes. It is very meaty and fleshy, and consequently heavy. It ships better than most of the old sorts, ripens 10 days ahead of Stone and yields much more than Stone. It resists blight and other diseases better than any other variety. All gardeners and truckers are well aware of the fact that as soon as the Stone reaches the market, the early Tomatoes like Earliana and others, at once become back numbers. Now judge for yourself, the value of this Tomato which ripens as early as Chalk's Jewel and is of even better quality than Stone. Greater Baltimore means quicker sales and better prices, and a loss of money to those who will not plant it. The Purdue University Agricultural Experiment Station, at Lafayette, Indiana, undertook Tomato investigation and published the results in Bulletin No. 165, Vol. XVI, April, 1913. Extracts from that bulletin are as follows:

"The average calculated yields for three years for 11 varieties shows 'Greater Baltimore' ranking first with a yield of 16.26 tons per acre against Stone 13.38 tons per acre.

"Considering yield and quality, the 11 varieties tested will rank as follows as a field crop for canning: First, 'Greater Baltimore'.

"Picking season from July 25th to October 1st, the 'Greater Baltimore' yielded nearly 22 tons per acre."

"The 'Greater Baltimore' which has been gaining in popularity with the Canning Trade during the past two years, begins bearing 12 to 16 days earlier than Stone, when both are sown and handled in a similar manner throughout the season.

"It will also be seen that 'Greater Baltimore' is as early a bearer as Chalk's Early Jewel, which is considered an early sort.

"It is largely the earliness and the uniformity with which the plants bear a large number of large, smooth fruit throughout the ripening season that makes the 'Greater Baltimore' superior to the Stone which has been the Standard canning variety for many years.

"The average date of first ripening for the 'Greater Baltimore' variety was 120 days from the sowing of the seed in the hot beds and 65 days from the time the young plants were set in the field."

Pkt. 10c; oz. 20c; ¼ lb. 50c; 1 lb. \$2.00, postpaid.

PONDEROSA (88 days)—Enormous scarlet fruit. Pkt. 10c; oz. 40c; ¼ lb. \$1.00; 1 lb. \$4.00.

GOLDEN PONDEROSA (89 days)—Same in size as Ponderosa, only the fruit is golden yellow. Pkt. 10c; oz. 60c.

RED PLUM, RED PEAR, YELLOW PLUM, YELLOW PEAR—Either variety: Pkt. 10c; ¼ oz. 15c; ½ oz. 25c.

YELLOW HUSK OR GROUND CHERRY—Pkt. 5c; oz. 30c.

TOMATO MINGOLD—The color of its large, solid, smooth fruit is true orange-yellow highly attractive so that when placed on the market sells readily. Try Mingold.

TOMATO COOPER'S SPECIAL (82 days)

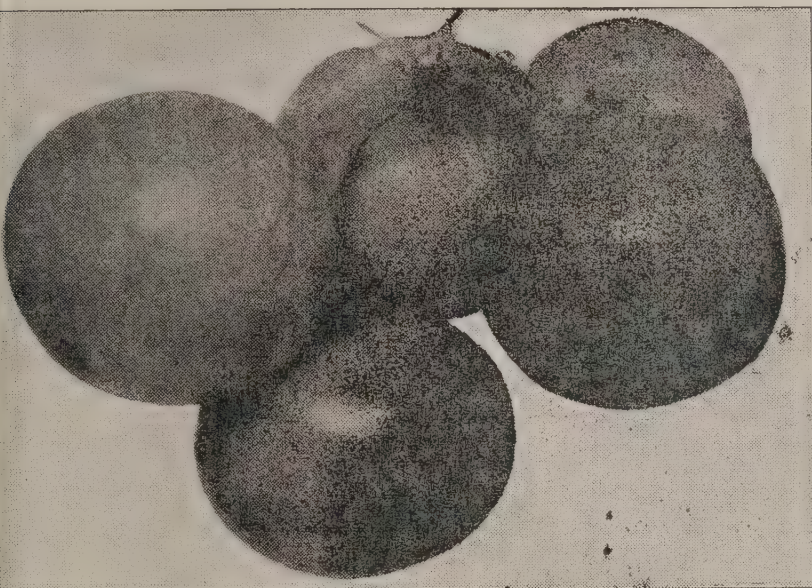
Large, smooth, meaty, globe-shaped, pinkish-red tomato. Free from acidity, superior to Livingston's Globe in size and heavy yielding qualities. Popular in all markets where pink colored tomatoes are the favorite. Very early. Called by the Florida growers "Self Pruning Tomato" because the plants need no pruning, due to their limited branching habit and because the vines are shorter than those of Globe or Gulf State Market. The vines are of vigorous growth and bear fruits in clusters of four to five every five to six inches of vine. Pkt. 10c; oz. 40c; ¼ lb. \$1.00; 1 lb. \$4.00.

TOMATO SUPREME GULF STATE (77 days)

The result of years of breeding work and vastly superior to regular commercial strains, producing a splendid increase in the amount of fruits which meet the rigid requirements of U. S. No. 1 grade. The fruits run high in larger sizes and show noticeably less cracking about the stem-end. Supreme Gulf State is almost as early as Break O' Day and quite earlier than Livingston's Globe. The plants set well in the lower clusters and bear large globular fruits over a long period. Picked green, the fruits color up to bright purplish-pink. Pkt. 15c; oz. \$1.00; ¼ lb. \$3.00.

TOMATO SUPREME MARGLOBE (77 days)

Materially improved in size and uniformity which we recommend without reservation as the finest stock of Marglobe obtainable. The fruits are a rich deep scarlet, color well around the stem-end and are uniformly globular. They run high in large sizes and show noticeably less cracking about the stem-end than ordinary Marglobe. Pkt. 15c; oz. \$1.00; ¼ lb. \$3.00.

**TOMATO SCARLET DAWN (70 days)**

One of the finest extra early red tomatoes, an All America Gold Medal variety. Fruit medium large with thick wall structure, globular, smooth, free from flat sides and exceptionally attractive. Color very bright scarlet. Ripens well to the stem. Plants medium heavy in growth, fairly open, producing immense quantities of fruit that is formed in clusters of 4 to 5. Recommended for both field as well as for greenhouse production. Pkt. 10c; oz. 60c; lb. \$6.00.

TOMATO RUTGERS (72 days)

Heavily productive, drought and wilt resistant tomato that proved dependable cropper in all parts of the country. First class for local marketing, canning and a good green-wrap sort for long distance shipping. Ripens from the interior outwards. Large fruit 7 to 8 ozs., in shape a slightly flattened globe, smooth, bright red, with heavy walls and small cells. Vines vigorous and heavy. Certified seed. Pkt. 10c; oz. 40c; lb. \$3.60, prepaid.

TOMATO MARGLOBE (77 days)—Main crop variety of vigorous growth, resistant to wilt and nail-head rust. Moderately productive. Fruit nearly globular, smooth, bright scarlet, very solid, of fine quality. In our trials we find the first set fruit large and very high class but what comes after is fruit rather undersized. Pkt. 10c; oz. 40c; lb. \$4.00.

NEW METHOD

of growing Onion Prosperity. Make a sowing every six weeks, sowing the seed thinly in rows wide enough to allow cultivation from early spring till the end of August. When the plants are about 10 inches tall hill them up to have them blanched. In from six to seven weeks the plants will be 15 to 20 inches high, the blanched part ¼ to ¾ inches through. They are ready for the market. Place 6 to 9 onions in a bunch. On our market they never bring less than 20 cents per dozen bunches. The best soil for Prosperity is one that is moderately rich. In rich ground the plants grow too fast and become tall. If your ground needs fertilizer use about 100 lbs. of sheep manure per acre, in other words fertilize lightly to avoid fast growth. Last sowing of Prosperity Onion in our part of the country is done late in August. From this sowing we get a crop very early in the spring. We leave part of the plantation go to seed which we save and we use 6 pounds of seeds to the acre sowing in rows 15 inches apart.

PRITCHARD OF SCARLET TOPPER (73 days)—A scarlet "self topping", disease resistant variety. Fruits large, smooth, globular, solid with thick walls and cross sections. Color light scarlet. Pkt. 10c; oz. 40c; lb. \$3.00.

TOMATO EARLIANA (66 days)

To get a heavy crop of high quality tomatoes ahead of others, you must grow Earliana in heavily manured ground. Use well rotted manure and prepare your ground in the fall whenever possible. You must stake the plants, because when plants are left laying on the ground the fruit develops a green spot where it touches the ground. Do not use manure for other varieties of tomatoes except Bonny Best and Break O' Day. Both these varieties do much better when grown on manured ground. Otherwise the rule is for all tomatoes: no fresh manure. Pkt. 10c; oz. 60c; lb. \$7.00.

GROTHEN'S GLOBE (68 days)—The fruits are globe shaped, of positive bright scarlet color, free from objectionable yellow color about the stem end, firm, solid; interior ripens slowly. Vines somewhat open of upright growth with dense foliage protecting the fruit from sun scald. Well adapted to green wrap shipping. Particularly desirable for truckers and shippers in the South. Best adapted for light, sandy loam soils, producing an immense crop of first class fruit. Wilt resistant. Pkt. 10c; oz. 50c; lb. \$6.00.

Greenhouse Tomatoes

MICHIGAN FORCING—Fruit red in color, globular when ripe, smooth, firm, averaging 4-5 ounces, borne in clusters of 5 to 11 fruits. Self pollinating, wilt resisting, vigorous in growth, immensely productive even under poor light conditions. Best results are obtained when 4½ to 5 square feet are allowed each plant. Originated at Michigan State College. Pkt. 15c; oz. 50c.

KONDYNE RED—Fruits of medium size, globular, solid, smooth, bright scarlet. Extra early and very heavily productive. Favorite in England for growing in greenhouses. Pkt. 15c; oz. 50c; lb. \$8.00.

HUNDREDFOLD—Originated in England where it is considered the King of forcing tomatoes. The fruits are medium in size, very uniform and of perfect globular shape so that in grading for the market very little sorting is required. Color rich bright red. Heavily productive, largely owing to the fact that the plants are exceptionally short-jointed so that where most varieties produce 6 trusses of fruit, Hundredfold will develop 8 trusses on the same height of plant. Pkt. 30c; oz. \$2.50.

GULF STATE FORCING (77 days)—If your market will accept pink colored tomatoes of fairly large size, grow Gulf State. Gulf State produces a tremendous crop. Fruit globular, smooth, purplish-pink, free from cracking, thick skinned and very solid. Pkt. 15c; oz. \$1.00.

TOMATO CRACKERJACK (66 days)**A GREAT VARIETY FOR GREENHOUSE FORCING**

The fruit is solid, smooth, globe shaped, bright red and there is no waste, every tomato is saleable. Medium in size, just right as the grocers of our city put it. It takes 3 to 5 Crackerjacks to a pound, for this reason grocers prefer Crackerjack over the big sized tomatoes which are so hard to weigh unless cut in pieces. Nobody wants cut tomatoes, Crackerjack weighing without cutting is the sort desired. Crackerjack is a strongly self pollenizing variety, every bloom is sure fruit which is produced in bunches of 5 to 10 every 6 inches of a plant growth. Once it starts to turn in color it ripens quickly and evenly to the core. Crackerjack will yield bigger sized fruit if grown 10 degrees cooler than is required for other tomatoes. (Night temperature of 55 deg.). Price: Pkt. 15c; ½ oz. 30c; oz. \$2.00.

IMPROVED CRACKERJACK—Larger in size than the original strain, averaging 3 to 4 fruits to a pound. Color red, skin tough, making it a first class shipper and keeper. Best results are obtained when the plant is trimmed to about 6 feet. Pkt. 15c; ½ oz. 30c; oz. \$2.00.

TOMATO FIRESTEEL We have tried Firesteel under glass and can truly say that it is an excellent performer. The fruit is somewhat smaller when greenhouse grown but the crop is tremendous.

ABOUT TOMATOES

Tomatoes differ in size, quality, season of ripening, adaptability to different soil and growing conditions, etc. Important class to the market gardener are sorts of good size and quality and of early maturity.

In this class the most popular varieties are: Firesteel, Rutgers, 100% and Break O' Day. Every gardener located North should try every one of the four named varieties. In pink colored tomatoes the best at present are: Marvelous Pink Globe and Cooper's Special. Tomato growers located in the North must not grow pink colored tomatoes because pink colored tomatoes are hard to sell in the North, same as red or scarlet fruited tomatoes are hard to sell on the markets of the South.

Varieties suitable for shipping. We list many good varieties. Which variety is the best for shipping is hard to tell.

New varieties are created every year and what was a popular shipping tomato last year becomes a back number the year to come. We believe that the new Firesteel tomato will prove high class to grow in the South for shipping North.

Greater Baltimore and Brown Special are sorts popular for canning and for juice. The small fruited tomatoes as well as the white and yellow colored sorts, together with such varieties as Oxheart and Ponderosa are of hardly any interest to the market grower.

FIRESTEEL TOMATO—Firesteel will displace many a variety now popular as soon as it will be known that Firesteel is: Extra early. Large and solid. Produces fruit under almost any kind of growing conditions.

HOW TO GROW TOMATOES ON STAKES

Early in June place 5 foot stakes within two inches of the base of each plant. With a sharp blade reduce each plant to three of the strongest branches and tie these to the stakes, using soft but stout string. Remove all side shoots at the base of each plant and all suckers which develop at the leaf joints. When the plants reach the top of the stakes begin to prune out the centers also. Staked tomatoes yield 30 to 40% more of perfect fruit than plants that spread over the ground and the plants bear earlier.

TOMATOES FOR CANNERIES

As an answer to many inquiries, we say that canners favor Improved Stone and Greater Baltimore. Most canneries furnish the seed to the growers. If the choice of the variety is left to you, try besides the two named our 100% variety or Norton, if your land is infested with disease. Both are wilt and disease resistant varieties.

TOMATOES UNDER GLASS

In the North seed is generally started in January. No use to start earlier. During the dark winter months tomatoes will not set fruit, the blossoms fall off.

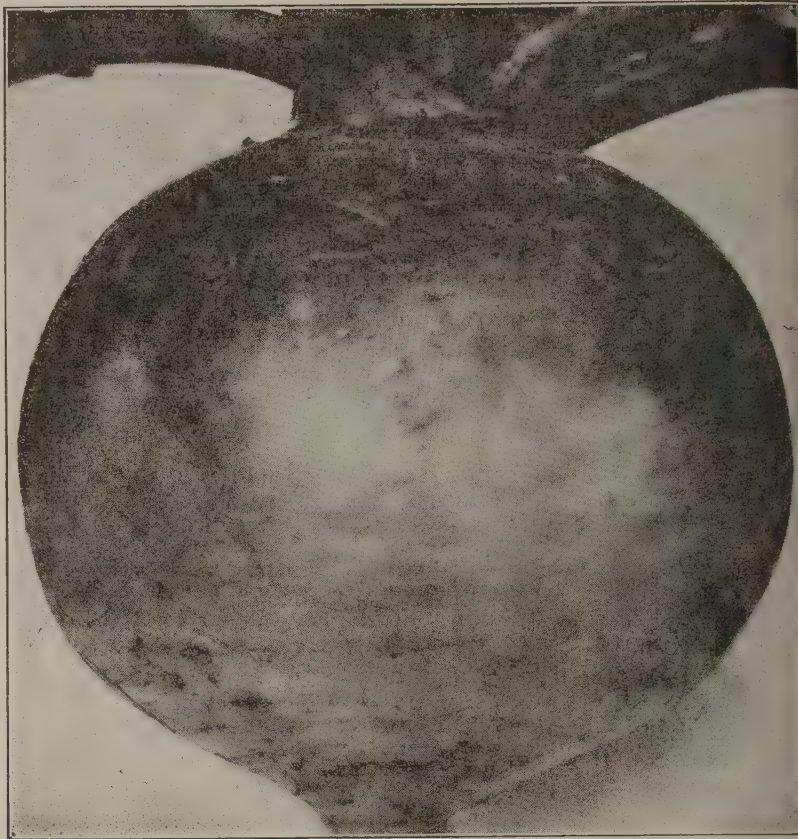
Sow in flats, transplant into 2½'s when the plants are about 4 inches high, set them 15 inches each way, keep well watered and growing fast till they get to blooming. While in bloom water sparingly until the tomatoes set. When you get five clusters on the plants top them and water plentifully. Be careful in watering. Marglobe will not mildew even if the walks in the greenhouse are wet, but to be successful with most other sorts, Marvelous Globe and Crackerjack included, you must grow them in a house with glass tight so there will be no drip and your walks must be dry. Some growers keep their tomatoes wet from start to finish which is a mistake. Watering, as we say, will result in a splendid crop. Crackerjack and Ideal Forcing runs about five fruits to the pound. For the earliest sales, while prices are highest, grow small fruited sorts like Crackerjack or Ideal Globe, for a later crop Marglobe or Marvelous Globe pay better.

TOMATO OXHEART (90 days)

A mighty attractive tomato, unusual in shape, meeting with instantaneous favor everywhere. Heart-shaped, pink in color, meaty and solid, of large size, specimens weighing two pounds or over being quite common. Almost seedless. Fairly early. Pkt. 10c; ¼ oz. 20c; oz. 80c.

TOMATO MINGOLD

TOMATO MINGOLD (73 days)—Fruit globular, medium large, very solid, very smooth, of bright orange-yellow color and of superb quality. Almost seedless, mild in flavor with only a trace of acidity. Vines large, heavily productive. Pkt. 15c; 1 oz. 60c; lb. \$5.00.



PURPLE TOP WHITE GLOBE SELECT

Our select Purple Top produces beautiful, globe shaped turnips, clear, bright purple at the top and snow-white at the bottom without small side roots. Flesh sweet, never bitter at all stages of growth. Absolutely the finest strain to be had. Pkt. 5c; oz. 10c; lb. 80c, prepaid. (55 days).

TURNIP ALL SEASONS (28 days)

New. Globe shaped, white skinned, white fleshed Turnip that is ready four weeks after sowing no matter at what season the seed is sown. Retains its shape long after the roots are fully formed and stays sweet even during hot and dry weather. This may be hard to believe yet it is a fact.

TURNIP SHOGGIN

Produces globe shaped roots with smooth skin and upright foliage furnishing the highest class of "greens." This is the finest foliage turnip in existence and we have an extra selected high class strain with leaves strictly upright and closely "bunched up." Pkt. 5c; oz. 10c; lb. \$1.00, prepaid.

SURE CROP TOP TURNIP

Yields a big crop of "greens" in hot and dry weather and is the only variety grown for tops that will come through, when sown during hot summer months from June to September, when Seven Top is out of the question. The tops of Sure Crop are of dense, robust, upright, compact growth and practically free from insects and louse. It is claimed that once tried, prepared for table, it is preferred to other turnip greens, because the leaves of Sure Crop are of milder taste, fine flavored, tender and free from acidity and bitterness. Of much quicker growth than Seven Top. Roots edible, globe shaped with pearly white skin and white, mild, sweet flesh. Oz. 10c; 1 lb. 80c; 10 lbs. \$7.00; Pkt. 5c.

TOKYO MARKET (29 days)—Globe shaped, white in and out, always sweet.

FANCY TURNIPS

To get richly colored, fancy turnips of any of the purple top varieties, you must not allow the roots to crowd one another out of the ground. And you must not allow the roots to starve from lack of water. Properly thinned out, you will get beautiful roots from the seed we send out.

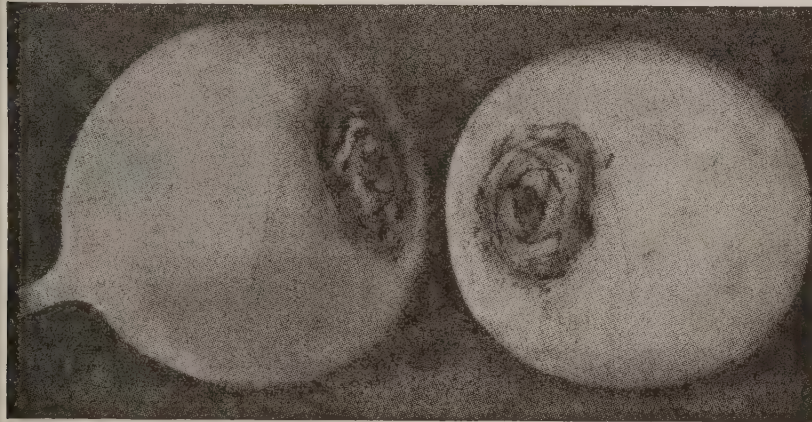
SUPREME MARGLOBE in Illinois. One of our customers writes under the date of Sept. 1, 1944 as follows: I want to tell you about the Supreme Marglobe tomato seed I bought of you last spring. I set about 600 Supreme Marglobe plants and I never saw such tomatoes in my 40 years of growing tomatoes. They outclassed the Pritchard and the Firesteel in every way. I never seen so many on a vine and hundreds of them would average a pound each. I got twice as much per bushel as other gardeners got for theirs. From Mr. J. B. G., Decatur, Illinois.

Turnips and Rutabaga

CULTURE—One-half ounce for 100 feet of row, one and a quarter pounds per acre. If sown broadcast use two pounds to the acre. Drill into rows foot apart and thin to 4 inches apart in rows. Frequent cultivation hastens the crop to maturity. For general crop turnips can be sown at any time until the latter part of August.

RUTABAGA should be planted 18 inches between the rows and thinned out to 6 inches in the row. Requires longer season to mature than is the case with common turnips.

The most desirable early turnip to grow is **SNOWBALL**. It is large and of the highest quality. The best late Turnip is **PURPLE TOP WHITE GLOBE**. The earliest of all is turnip **Yori**



TURNIP SNOWBALL or JERSEY LILY

Extra Early—Extra Good—(40 days)

The roots are a perfect globe, snow white in and outside, highly attractive when bunched, the flesh solid, sweet, tender and perfectly delicious whether eaten raw like an apple or cooked. Of much better quality than the Milan varieties. Pkt. 5c; oz. 10c; lb. 80c.



RUTABAGA SUPERBA (74 days)

The finest rutabaga that grows. Perfectly round, bright, clean, yellow in color, fine grained and sweet. Earlier than other varieties and neckless, the same shape as Purple Top Globe Turnip. A trial will convince you that it is a high class variety. Originated by a New England gardener. **Superba** sells on the New York market at 50 to 75 cents per barrel above all other stocks. Pkt. 5c; oz. 10c; lb. 80c, prepaid.

AMERICAN PURPLE TOP (88 days)

Globe shaped, upper portion of the root rich purple. Flesh yellow and sweet. An old and still very popular variety with a prominent neck. Ready two weeks later than **Superba**. Pkt. 5c; oz. 10c; lb. 80c. prepaid.

SQUASH OR STINK BUGS—These cannot be destroyed with insecticides. Strong nicotine solution kills them but it also kills the vines. The only way to do if one wants to exterminate them is to lay planks in the squash patch, get up early in the morning and kill all the bugs that are gathered under the planks. If this is done for a few days there will be no bugs.

STORED SQUASH—To minimize loss it is imperative to exercise greatest care in harvesting to avoid bruising or even scratching as decay starts from even slight injury. Even the hardest skinned squashes are easily bruised and will sooner or later spoil in storage.



HARDY OSTRICH FERN

PALM OF THE NORTH

THE FINEST OF ALL HARDY FERNS

Of all tall growing, hardy ferns, Ostrich Fern is the best. It is a vigorous, quick growing fern, does well in almost any kind of soil, both in shade or fully exposed to the sun. Height 4 feet. Of unusual beauty, like a palm in appearance. Plant a few in full or partial shade somewhere where visitors will see them. You will have calls for them and will sell lots of them. We can supply dormant roots in any quantity. **CULTURE**—Plant in rich soil, cover the crowns about an inch and apply plenty of water. Besides planting hardy ferns require no care. Space foot apart.

By express, not prepaid:	Dozen	100	1000
MEDIUM LARGE ROOTS.....	\$1.00	\$7.00	\$60.00
LARGE ROOTS	1.25	8.50	80.00
EXTRA HEAVY ROOTS.....	1.75	12.00	110.00

We sell 25 roots or over at 100 rate, 250 roots or over at 1000 rate. Prices are F. O. B. Council Bluffs. No charge for packing.

HARDY MAIDENHAIR FERN

Very graceful, leaves arranged in a semi-circle on long stiff, dark brown stems, 12 to 18 inches long. Must be planted in good, well drained soil, in full or partial shade, the roots covered with soil about an inch deep. It grows slow at first, but once established it multiplies fast. For massed effects plant about 10 inches apart. Unlike other hardy ferns, Maidenhair does well as a house plant. Selected root: 6 for 70c; 12 for \$1.20, not prepaid. In lots of 25 or over at \$8.00 per 100.

GROWING IMPOMEA PLANTS

Start in heat in March, place 10 seeds in a 4 inch pot, later pulling the weaker plants, leaving 4 of the strongest plants. Place the pots in a cold frame and water sparingly which will hold the growth of your plants down and make it easier for you to handle the plants. Avoid "tangling up."

To induce extra heavy production of bloom, do not plant Ipomeas in excessively rich ground. Do not water heavily, do not use fertilizer of any kind. Maximum amount of bloom is produced in poor sandy ground and when the plants are kept on the dry side.

LATE SWEET PEAS UNDER GLASS

Sown about foot apart at the same time with Early Winter Flowering Peas, after Chrysanthemums, these Late Sweet Peas being of less rapid growth will not interfere with the growth of the Early kind, until the Early ones are almost exhausted. Then the robust growing Late, will overtake the played out Earlies and you will get a heavy crop of high class bloom in May and June. **LATE SWEET PEAS** will produce fine flowers sown late in winter with spring not far off. Sown under glass in summer, will make lots of vines, but never a flower.

In the South

Early Flowering Sweet Peas, sown after danger of heavy frost is past, will produce in the open a crop of flowers two weeks ahead of Late Spencers **PLANT GROWERS**—Do not raise Verbena Royal Boquet Fireball in flats for spring sales because this variety start to branch out right from its baby stage, which results in a tangled mass of plants. All other Royal Boquet Verbenas are all right for growing in flats.

THE "OUTLINE" OF GARDENING

SOIL—Any soil where weeds grow is all right or can be made so. If the soil is poor, apply manure, the more the better. Spade it under. Spade 9 to 12 inches deep, preferably in the spring, then rake the soil smooth. If the soil is too heavy, (gumbo, clay), apply stable manure; if it is too light (sandy), again apply manure. Manuring makes light soils heavier and heavy soils lighter. This sounds like a joke, but it is a fact. If your soil is pure muck (peat), it is ideal for raising cabbage, lettuce and other leafy vegetables, but before you can grow all kinds of crops on this soil you must thoroughly mix it with regular soil, be this sandy, clayey, or a good loam. With soil and small application of stable manure you will raise wonderful crops, as muck soil is exceedingly rich.

SOWING—Read cultural directions in this book. Do not cover the seed too deep—be very careful in this respect. Seeds the size of a pin head should be covered one-fourth to one-half inch deep. Larger seeds like those of radish or beets should be covered three-fourths to one inch deep. Corn, beans and peas, should be covered two to three inches deep. Very fine seed like those of begonia, must not be covered at all, merely pressed to the soil and sow such fine seed first in a box, not over 3 inches deep, filled with finely sifted soil. Cover the box with a pane of glass.

VERY IMPORTANT—Whenever you read in our catalog "thin out to 4 inches apart in the row" as the case may be, do so as soon as the plants are up. If you allow the plants to crowd each other the crop will never properly develop. Leafy vegetables will be spindly and sometimes will quickly shoot to seed and the root crops will have thin, long and deformed roots. The beginner may think that the more plants in the ground the bigger the harvest. That is a mistake. Big and fine crops will come only from plantings where the plants have room to develop.

WHY SEEDS SOMETIMES FAIL TO "COME UP"—All real seedsmen send out good live seeds with strong germination. But seed will fail to come up if it is covered too deep, if the ground is not moist enough, if the weather is too hot, if a hard crust is formed on top of the soil, if mice, birds or insects will get it, if sown in too hot a hotbed and from other causes which are, for a while anyhow, impossible to explain. These things happen no matter how good the seed sowed, and all old gardeners know it. In the great majority of cases seeds come up just fine, yet sometimes they fail, and you should be informed about the probable causes. Do not blame the seedsman, he is rarely to blame, he is doing his part. Be optimistic—do like a neighbor of ours did. He sowed beet seed three times, every time in a row about an inch or so apart from the old row. The seed did not come up. He sowed the fourth time, then came a heavy rain, and in a few days the seeds from all four sowings were up.

CULTIVATION—As soon as your plants are big enough to handle, thin them out, pull the weeds, transplant and keep on cultivating. The more you use the hoe or the cultivator, the faster your crops will grow, and the more they will produce.

SETTING OUT PLANTS—You will hardly ever lose a single plant if you will plant in a moist soil, and if you will press the soil firmly to the roots. NEVER, NEVER place manure near the roots of a plant. Manure contains strong chemicals and will either kill the plant outright, or damage its roots to such an extent that the plant will stay stunted. If you must manure, place the manure a foot or so away from the roots. Putting manure right to the roots has killed thousands of trees and plants. Do not plant in dry soil. Wait for a heavy rain or soak the ground with water, then let it dry off so that when you press a handful of it it will not stick together. Never work soil that is wet; wet soil when worked sticks together and hardens just like a brick. Plants do well only in soil that is porous, soil that crumbles easily when handled.

MORE INFORMATION—You will get more information elsewhere in our catalog. It is packed with valuable pointers. Also consult your friends about gardening, exchange your experience with them, read garden magazines, and after a year or two of experience you will know all you need to know. Your garden will be a source of pleasure and profit.

GARDENING FOR PROFIT—If you want to raise vegetables or flowers for profit, hire yourself to a practical gardener or florist. One year of experience will be worth more to you than all the books that were ever published on gardening. However, read books; they are the cheapest source of information. With actual experience in a garden or greenhouse, the books you will read afterwards will do you twice as much good, because many things now hard to understand will be plain to you. Experience is the best teacher.

HOW TO MAKE A HOT BED

In a sheltered spot, away from shade, dig a trench 6 feet wide, 2 feet deep and long enough to accommodate the number of sashes to be used. Standard hot bed sash measures 3x6 feet. Line the sides of the trench with boards, brick or concrete and to secure good drainage place medium sized rocks on the bottom in a layer of about 4 inches. Above the surface of the ground erect a frame 12 inches high in the rear, sloping to 3 inches in front to give an angle for sun rays and to secure enough "fall" to swiftly carry off rain water. Fill the trench with fresh horse manure which you must first pile up and allow to heat. When heated and steaming, work the pile over into a new pile. This new pile will get hot and steaming again in about 10 days and by this time has lost enough excess heat and is now safe to place into the pit. Fill up the pit to the surface of the ground, pack down firmly and evenly, then place over it 4 inches of good friable dirt. Put on sashes and do not sow until the heat under the sash registers between 80 and 90 degrees. Ventilate your plants, give them all the air possible by raising the sashes on cold days and removing them entirely on warm days. Water enough to soak the soil, but not to reach the manure below. **COLD FRAME** is built on the surface of the ground, like a hot bed in appearance, but without the manure.

How to Make Gardening Pay

Work, work, work, and some thinking will do it. Thinking plays an important part. To make gardening or any other business pay is not easy. There is strong competition—there are too many gardeners. But no matter in what line you may be engaged, you would find the same conditions—hard struggle, lasting for years before one is a success. That can not be helped, we must submit to that, must never get discouraged. You work hard, all gardeners do, in working you are hard to beat. But how about thinking, planning ahead? There it is where too many gardeners are below the mark. Thinking, weighing facts in your mind as you see them happen, noticing the constantly changing conditions and chances, is what counts.

Noticing, for instance, that a certain crop is bringing very low prices, you can gain by planting this same crop on an enlarged scale the following season. A little thinking will reveal to you, that you can gain by cutting down or planting only the usual acreage, the season to follow, of crops that at present are paying well. Why? Take potatoes in 1927. That year potatoes sold for real money, but in 1928 prices were below the cost of production. Everybody planted potatoes, folks planting potatoes in 1928 must have been under the impression that because in 1927 potatoes paid well, they will always pay well. They did not, the growers lost money. Another case. In 1927 carrots in our market were hard to sell even at very low prices. Disgusted, the growers in 1928 either did not plant carrots at all or very few only. Result was that in 1928 carrots were among the crops that paid well. Spring crop of beans in 1928 did not bring the cost of picking them, the growers were "sick" of beans and did not plant any for a late crop. A few gardeners did and made money, beans were scarce and prices good. This proves that low prices are followed by high prices and high prices are followed by low prices. It is easy for the thinking man to foretell how the market will go for months ahead.

And that is very important as it means the difference between profit and loss. Think twice, before you place an order for seeds. It pays to plant the best only, regardless of what the seed costs. Ordering wisely chosen varieties will help a great deal to make gardening profitable. We know of a local gardener, who in 1927 planted a new superior variety of late cabbage, of a muskmelon, a new tomato, besides a few other items of less importance. His melons, cabbage and other vegetables being of superior quality fetched fancy prices; he found gardening a well paying business, while many other gardeners had a hard time to make expenses. They did not think, our gardener friend did.

HOW MANY PLANTS

FROM AN OZ. OF SEED? You can expect from 1 oz., from 1 lb.		
Asparagus	1,000	16,000
Brussels Sprouts, Broccoli, Cabbage, Cauli- flower, Rutabaga, Egg Plant.....	3,000	48,000
Chicory	3,000	48,000
Parsley	3,000	48,000
Pepper	2,000	32,000
Tomato	4,000	64,000
Onion, Leek	2,500	40,000

You will get less plants from seed sown in the open than you will when sowing under glass or in a seed bed.

NUMBER OF PLANTS TO THE ACRE—It takes 43,560 plants when set foot apart each way; 10,890 when set 2 feet apart each way and 4,840 when set 3 feet apart each way.

LAST SOWING DATES

You can sow and be sure that they will "make," Broccoli, leek, pepper and tomato up to May 15th. Onion and parsnip up to May 20th. Lima Beans, celery, melons, cardoon and salsify up to June 1st. Swiss Chard and peas up to June 10th. Brussels sprouts, cabbage, cauliflower up to June 15th. Sweet corn and endive up to July 1st. Carrots, cucumber, winter radish up to July 10th. Dwarf beans, beets and Florence Fennel up to August 1st. Chinese cabbage, kale, mustard and turnip up to August 10th. Spinach and early radish up to September 1st.

The dates mentioned are for the approximate latitude of Chicago and New York and allowances must be made in colder and warmer sections.

CUT WORMS—The following bran mash gets them. Two pounds of bran, one pound of sliced oranges or lemons, 2 ozs. of paris green and one pint of molasses which is enough for one acre. Spread over the field in the evening, will result in cut worm free field in the morning.

HOTBEDS—Write for free bulletin entitled: Hotbeds and Coldframes No. 1743 to U. S. Dept. of Agriculture, Washington, D. C. Write also to Washington State College, Pullman, Wash. for bulletin entitled: Hotbed Construction—Electric and manure types.

VEGETABLES UNDER GLASS

As an answer to inquiries as to what vegetables can be grown successfully under glass we say: Many. What are the profits? Answer: Poor and fair only to growers that make vegetable growing under glass their specialty. That means, first class equipment, long years of experience, good connections with distributors of hot house vegetables. All this takes years, to come into being.

As we see it our correspondents are willing to work hard to earn the dollars, a hard task, because dollars are not fairly distributed. Big heaps with a few, none with millions of others. A good advice would be appreciated by many, ourselves included. We suggest: Leave vegetables alone. Raise seedlings and rooted cuttings of popular flowers including good novelties. If you heat your houses throughout winter, you can grow many plants that later can be transferred to cold frames. To get an idea what to grow study the classified ads in the trade papers. Grow strawberry plants, rhubarb, etc., for local sales. Raise vegetable plants and have a supply of these early and late in the spring and way into early summer. Your vegetable plants you can sell locally by advertising in the local papers and by hanging out a big sign in front of your place. Plants of flowers you will move through ads in the classified columns of trade papers. It cost money to advertise but to deliver vegetables to grocers, etc., costs more money yet. With careful management you will make some profit right from the start and you will work up profitable trade and the number of your customers will grow if you will supply first class plants, true to name and treat your customers as you expect to be treated yourself.

You will get a valuable bulletin free if you will write to: Ohio Experiment Station, Columbus, Ohio, asking for Bulletin No. 110, entitled "Vegetable Forcing in Ohio."

GREENHOUSE OPERATORS—Write to Illinois State Natural History Survey, Urbana, Ill., for a free copy of circular No. 2, entitled "Greenhouse Pests", by Charles C. Compton. Contains extremely valuable information.

ABOUT LIME

LIME makes heavy soils porous and lighter, light soils more binding, it makes food elements the soil already contains available for the use of plants. Lime is not a fertilizer. It is beneficial to certain crops and harmful to other crops. On some soils liming results in greatly increased crops, on others it is decidedly harmful. Do not use lime before thoroughly posting yourself—write to Dept. of Agriculture, Washington, D. C., for information.

How to tell whether lime in soil is needed. Press a ball of damp dirt, break the ball in half, insert a strip of litmus paper (for sale in any drug store) press again and if after half an hour the paper turns pink it is a sign that the soil is sour and needs liming. Apply lime in the fall or a few weeks before sowing, using half to one ton of lime per acre.

Cucumber Beetles

"The most effective remedy for striped cucumber beetles on cantaloupes, cucumbers and similar vine crops is to smear some pine tar on a corn cob and place the cob on a hill between the young plants. Add more tar to the cob at intervals of 7 or 8 days. The odor of turpentine is offensive to the beetles and they pack up and get away. It is a simple thing, but it beats all other remedies."

NEW VARIETIES of vegetables are best tried on a small scale first. This because a new variety of tomato for instance will make a good showing on heavy land and a poor one on sandy land. Also that same new tomato may be first class in the corn belt but not so good in the cloudy climate of the state of Washington. It takes time to find out as to the value of a new variety, therefore to be on the safe side try on a small scale to see of what value the new variety will be on your own land and under the climatic conditions in your section of this big country.

ROADSIDE MARKETING

You will meet with success if you will make as big a display as possible. Your prices must be within reason and you must be as courteous and accommodating as you are capable of. Politeness costs nothing, but in business is a force of unestimable value. Handle nothing but high class stuff. If you must market second grade stuff, price it accordingly and mark it as second grade. Place signs several hundred feet each side of your stand. Make your message on the sign as short as possible and in conspicuous letters. You must have plenty of parking space. Make your premises outstandingly different from the rest of the country-side. Plant lots of cannas, dahlias, zinnias, in a word surround your place with a sea of flowers. You can produce the flowering material on your own land with minimum cost. Keep your parking space free of dust by sprinkling or oiling. Offer bargains as often as possible. Bargains mean no immediate profit to you. However, that only seems so. The fact is that bargains draw new trade, lead to new connections. Bargains are a powerful force in establishing a profitable trade.

HIGH CLASS RADISH and other root crops are produced by the following method. Plow the land in the fall. In the spring disc the ground to the depth of 6 inches, no more. You will have six inches of loose top soil and firm ground underneath. This firm soil will stop roots from going down too deep, your carrots will be thicker around. For radishes besides preparing the ground as outlined you must manure heavily in August or September using well rotted cow manure and some tankage. Your radishes will grow fast in this rich ground, will be perfect in form, quality and of bright color.

SALVIA SPLENDENS WHITE is not offered by us because the flowers are not white. They are not yellow or green, they are "no color"—in a word, worthless. The same can be said about Salvia Splendens Purple. The color of this variety is dark and unattractive.

PARCELS POST RATES

Weight in pounds	Local	Zones							
		1st Up to 50 miles	2d 50 to 150 miles	3d 150 to 300 miles	4th 300 to 600 miles	5th 600 to 1,000 miles	6th 1,000 to 1,400 miles	7th 1,400 to 1,800 miles	8th Over 1,800 miles
1	\$0.07	\$0.08	\$0.08	\$0.09	\$0.10	\$0.11	\$0.12	\$0.14	\$0.15
2	.08	.10	.10	.11	.14	.17	.19	.28	.26
3	.08	.11	.11	.13	.17	.22	.26	.32	.37
4	.09	.12	.12	.15	.21	.27	.33	.41	.48
5	.09	.13	.13	.17	.24	.33	.40	.50	.59
6	.10	.14	.14	.19	.28	.38	.47	.59	.70
7	.10	.15	.15	.21	.31	.43	.54	.68	.81
8	.11	.16	.16	.23	.35	.49	.61	.77	.92
9	.11	.17	.17	.25	.38	.54	.68	.86	1.03
10	.12	.18	.18	.27	.42	.59	.75	.95	1.14
11	.12	.19	.19	.29	.45	.64	.82	1.04	1.25
12	.13	.21	.21	.31	.49	.70	.89	1.13	1.36
13	.13	.22	.22	.33	.52	.75	.96	1.22	1.47
14	.14	.23	.23	.35	.56	.80	1.03	1.31	1.58
15	.14	.24	.24	.37	.59	.86	1.10	1.40	1.69
16	.15	.25	.25	.39	.63	.91	1.17	1.49	1.80
17	.15	.26	.26	.41	.66	.96	1.24	1.58	1.91
18	.16	.27	.27	.43	.70	1.02	1.31	1.67	2.02
19	.16	.28	.28	.45	.73	1.07	1.38	1.76	2.13
20	.17	.29	.29	.47	.77	1.12	1.45	1.85	2.24
21	.17	.30	.30	.49	.80	1.17	1.52	1.94	2.35
22	.18	.32	.32	.51	.84	1.23	1.59	2.03	2.46
23	.18	.33	.33	.53	.87	1.28	1.66	2.12	2.57
24	.19	.34	.34	.55	.91	1.33	1.73	2.21	2.68
25	.19	.35	.35	.57	.94	1.39	1.80	2.30	2.79
26	.20	.36	.36	.59	.98	1.44	1.87	2.39	2.90
27	.20	.37	.37	.61	1.01	1.49	1.94	2.48	3.01
28	.21	.38	.38	.63	1.05	1.55	2.01	2.57	3.12
29	.21	.39	.39	.65	1.08	1.60	2.08	2.66	3.23
30	.22	.40	.40	.67	1.12	1.65	2.15	2.75	3.34
31	.22	.41	.41	.69	1.15	1.70	2.22	2.84	3.45
32	.23	.43	.43	.71	1.19	1.76	2.29	2.93	3.56
33	.23	.44	.44	.73	1.22	1.81	2.36	3.02	3.67
34	.24	.45	.45	.75	1.26	1.86	2.43	3.11	3.78
35	.24	.46	.46	.77	1.29	1.92	2.50	3.20	3.89
36	.25	.47	.47	.79	1.33	1.97	2.57	3.29	4.00
37	.25	.48	.48	.81	1.36	2.02	2.64	3.38	4.11
38	.26	.49	.49	.83	1.40	2.08	2.71	3.47	4.22
39	.26	.50	.50	.85	1.43	2.13	2.78	3.56	4.33
40	.27	.51	.51	.87	1.47	2.18	2.85	3.65	4.44
41	.27	.52	.52	.89	1.50	2.23	2.92	3.74	4.55
42	.28	.54	.54	.91	1.54	2.29	2.99	3.83	4.66
43	.28	.55	.55	.93	1.57	2.34	3.06	3.92	4.77
44	.29	.56	.56	.95	1.61	2.39	3.13	4.01	4.88
45	.29	.57	.57	.97	1.64	2.45	3.20	4.10	4.99
46	.30	.58	.58	.99	1.68	2.50	3.27	4.19	5.10
47	.30	.59	.59	1.01	1.71	2.55	3.34	4.28	5.21
48	.31	.60	.60	1.03	1.75	2.61	3.41	4.37	5.32
49	.31	.61	.61	1.05	1.78	2.66	3.48	4.46	5.43
50	.32	.62	.62	1.07	1.82	2.71	3.55	4.55	5.54

ABOUT SOWING AND SEEDLINGS

To be successful with sowings to "make" the seed "come up" a few rules must be observed especially so when it comes to seeds that are fine as dust or that lay long before they germinate.

We supply seeds with strong germination, seeds that will grow if given right treatment. Whenever you read in our descriptions: "seeds lay long before it germinates" you must allow the time required. Some growers expect a stand no matter what the item sown, in from 5 to 20 days. Many seeds germinate in that time but there are seeds that will not germinate before 4 to 8 weeks and in a few cases it takes as much as a full year for the seed to germinate. It is wrong to abandon a sowing just because the seed did not come up like radish seed does. This does not apply to seeds of which all experienced growers know the time required for their germination. When for instance, aster seed is not up in two weeks, something is wrong and there is no use of allowing more time for the seed to "come." Another sowing must be made, the cause of failure found and in the future avoided.

Keep all sowings MODERATELY moist, water carefully in a fine spray or if need be, supply moisture from below. Sow in flats, place the flats in hot beds, keep the hot beds CLOSED till the seed comes up. Avoid drafts if you are sowing in a greenhouse. When the seed is up and the weather sunny and mild, lift the sashes during the noon hours. Lift the sashes the first day but slightly and not for a longer time than half an hour or even less if you will see your seedlings going down as a result of the shock from the sudden flow of cool air. Many a reader remembers the time when his seedlings were disappearing and he did not know the cause or a way to stop the loss. A sudden exposure of the tender seedlings to air might have been the cause. Or maybe the sun burned up the seedlings. In one case it was a sudden chill, in the other, failure to shade the seedlings that caused the loss. As the seedlings develop give them more air and take the sashes off entirely when the seedlings are well hardened. You will save water and time if you will lay a piece of paper on top of the soil in the flat after your seed is sown. The paper must be promptly removed when seedlings are appearing and the flats must be placed for a short time away from strong light. When flats are covered with a pane of glass the glass must be taken off every day, wiped clean and placed back again. This to prevent water from dropping down from the glass and thus to prevent loss of seedlings of such plants as Double Petunia, Gloxinia, etc., of which the seed is very expensive. You will find more information elsewhere in this catalog.

Commercial Plant Propagation by Alfred C. Hottes is a mighty valuable book to every grower of flowers, nursery stock, etc. This book can be had from: A. T. De La Mare Company, New York, N. Y. If you read German you can get from us: Die Anzucht der Pflanzen aus Samen in Gartenbau by Heinrich Benary. This is an immensely valuable book. It costs \$3.00 per copy. If the price was \$30.00 per copy we would pay it and still feel that we did get our money's worth. This book is not available in the English language.

MOTHER'S DAY What pot plants to grow for Mother's Day? The most popular in order of their listing are: Roses, Hydrangea Hortensis, Japanese Spirea (Astilbe) Calceolaria, Saintpaulias, also Dracaneas and Boston type ferns.

Why not try something new and thus place yourself beyond competition. We suggest growing the following, rarely seen flowers. All are sufficiently attractive, sell readily and if any of them should stay unsold, you will have ample opportunity to turn the plants into cash up to middle of June. **AETHIONEMA PERSICUM**—Pot up a few and see the plants sell.

ANDROSACE CORONOPHOLIA—Sow in June. The seed will lay for four months before it will germinate. Pot up singly, carry over winter in cold frames, apply heat early in March (45 degrees.)

ANGELONIA—Popular in Europe as a house plant. Should prove a good selling plant.

ANEMONE DOUBLE ST. BRIGID—This is one of the very finest of pot plants. Easily raised from seed. If located North, protect over winter with strawy material or lift the corms and winter them inside.

BLEEDING HEART—This always sells. Make divisions late in fall with 2 to 5 eyes, place these in 4 inch pots, bury the pots in the ground outdoors. The potted roots need no protection over winter. Move the pots under glass in March to get blooming plants in April and May.

ANTIRRHINUM—Potted Snapdragons in bloom will sell at any time in the spring months. Try Majestic Snowstorm and Tom Thumb Christmas Gem.

BELLIS—Sells readily especially if it will be the new variety American Beauty or Fusilier. Both have the very large, very double flowers and when well grown are very outstanding.

BROWALLIA SPECIOSA MAJOR—Read the description.

CARNATION—Sow the seed in August and September in open frames, protect over winter with a covering of boards, place the plants in pots February or March. Or sow inside in January. Try Giant Prague Carnation, also Giant Chabaud. The seed of both varieties produces maximum amount of doubles.

CHRYSANTHEMUM MAY QUEEN—If you do not have a stock of this Chrysanthemum you are missing a good thing unless you are located somewhere where the common field daisy is growing wild. May Queen resembles the common single field daisy but produces larger blooms. We find it one of the best selling plants.

COLEUS—This sells well and is easily and inexpensively raised. You cannot go wrong on Coleus.

CYNOGLOSUM AMABILE—See the description.

PINKS (DIANTHUS)—All Pinks are worth growing. Try some Sweet Wivelsfield, Neglectus and Winteri.

DIASCIA BARBERAE—By all means try this as a pot plant.

DIMORPHOTECA—Read the description.

DRYAS OCTOPETALA—Makes very fine pot plant.

ECHWERIA—Is easily raised and easily sold.

EUPHORBIA POLYCHROMA—Beautiful and uncommon. Seeds itself and sells at sight when in bloom. The seed germinates unevenly and sometimes lays long before it "comes up."

GENTIANA ACAULIS—Cannot be produced from seed to salable specimens in a hurry. Very much worth growing. See the description.

GESNERIA CARDINALIS—See the description.

GODETIA—Easily and inexpensively raised and has few rivals as a pot plant. Of all Godetias Sweetheart is the best seller.

HESPERIS NANA CANDIDISSIMA and *Hesperis Nivea* are real flowers and should be widely grown. As a perennial they are rather short lived and to have a stock of first class plants at all times must be sown every second year.

HELIOPSIS LINEARIFOLIA—Read the description.

KALANCHOE COCCINEA—Read the description.

LILIUM TENUIFOLIUM—Is as easily raised as radishes and sells at sight.

MYOSOTIS—Always popular. Easily raised.

NEMESIA—Well grown potted plants sell at sight.

NEMOPHILA—See the description.

NERTERA—See the description.

NICOTIANA CRIMSON BEDDER—Is very showy plant.

NIEREMBERGIA—Is a beauty. To have blooming plants early in the spring, sow late in the fall.

OXALIS ROSEA—Will bloom early in the spring from seed sown in September. Seed very fine but comes up quickly.

DWARF ANNUAL PHLOX—Will make money for you if you

will start the seed in February or March under glass in flats. As soon as the seed shows up move the flats to a cold house (Temperature 40 to 45 degrees). Place the seedlings singly in small pots. The plants begin to bloom soon after potting but the first flowers must be pinched off as well as the first growth to induce compact, bushy growth. They soon will be in bloom again and will sell themselves. Try some of the **CECILY PHLOX**, a large flowering strain in many colors.

PRIMULA Auricula, Vulgaris, Cashmeriana and Officinalis. Potted plants will sell and they can be easily produced. *Cashmeriana* germinates readily, the others are best sown late in the fall in flats placed in open frames. When well covered with snow, cover the frames with boards to exclude all light. From this sowing you will get early in the spring four leaved seedlings that are first transplanted into flats later in the open or they can be placed in larger pots and left in the frames over winter. Early next spring cover the frames with sashes. The plants will soon cover themselves with bloom. Buyers will not be wanting. Primulas become unsightly when 2 or 3 years old, therefore should be sown every year or every other year to have first class plants on hand. Should prove paying plants everywhere because in bloom very early in the spring and long after, because highly attractive and practically unknown, therefore the value of a novelty. They will come through in fine shape even in Iowa if planted in partial shade and given perfect drainage. If planted in full sun, must be covered over winter in localities where the snow does not last long. The seed of all hardy primulas germinates only in the dark, all sowings must be covered to exclude light, but must be moved to light as soon as the seed is sprouted.

SWEET VIOLET—There are many varieties and of all we find Queen Charlotte the best for general purposes. It is perfectly hardy, free blooming and the fragrance is very pronounced. Best planted in a half shaded place but will hold its own even in full sun in spite of hot and dry weather. The plants multiply rapidly and sell readily.

TORENIA—Is popular as a house plant in Europe. Try it.

WHITLAVIA—This annual is a native flower of California. In beauty it compares favorably with gloxinia. Sown in March will bloom in May. Makes fine pot plant and is easily raised.

FLOWERS FOR DECORATION DAY The most favored is the Peony. Next best paying flowers are daisies and pyrethrum in bouquets. Bouquets of mixed flowers are also good sellers. In mixed bouquets growers in our locality use *Veronica*, *Hesperis Matronalis*, *Pyrethrum Roseum*, *Chrysanthemum May Queen*, *Lilium Tenuifolium*, *Lemon Lilies* and whatever they may have in bloom. These flowers with the addition of sprays of common asparagus sell almost as good as peonies.

FLOWERS FOR EASTER First of all comes Easter Lily, then Tulips, Hyacinths, Calceolarias, Saintpaulias.

FLOWERS FOR CHRISTMAS The most popular is the Oak Leaved Poinsettia. This cannot be grown from seed. Then you will have calls for Begonias, Cyclamen, Christmas Peppers, Christmas Cherries, Saintpaulias.

WHAT POT PLANTS will bloom from seed sown in January and February? Try the following: *Ageratum*, *Angelonia*, *Antirrhinum Tom Thumb*, *Acroclinium*, *Clarkia*, *Coleus*, *Erysimum*, *Godetia*, *Heliotrope*, *Linaria Fairy Boquet*, *Lobelia*, *Marigold Dwarf Varieties*, *Mimulus Tigrinus*, *Mignonne*, *Nemophila*, *Nicotiana Crimson Bedder*, *Nigella*, *Dwarf Phlox*, *Petunia*, *Rhodante*, *Tagetes*, *Verbena Royal Boquet*, *Vinca Rosea*, *Whitlavia*, *Schizanthus*, *Dianthus Wivelsfield*.

Statice, Gypsophyla and the Florist

When fresh flowers are scarce, dried statice and gypsophyla will save the situation as they can be used in every case almost, when wreaths and funeral designs are needed. Store the sprays in a dry place, protect from dust and sprinkle the tops a few hours before needed.

SEEDS will quickly lose their germination if stored, even for a short time, in places where the atmosphere is full of humidity, such as greenhouses, cellars or in the kitchen. Your seeds will keep for months and even longer if you will store them in a dry, airy and cool place. Save whatever seeds you may happen to have on hand by placing the seeds in bags or fairly tight boxes and placing these out of the reach of mice. Seeds of palms must be stored in dry dirt or dry sawdust, seeds of water plants must be stored in water.

RAISING FLOWERS FROM SEED

I would like to raise flowers but flowers is something that I do not know anything about. We have read this remark from many people always followed with a request for advice which follows:

Read "Outline" of gardening on page 9 of this catalog. These directions apply to both flowers and vegetables. There are many different kinds of flowers—the beginner should know that the so-called ANNUALS are flowers blooming the first year from seed. Most of these are "hardy," meaning that the seed can be sown outdoors early in the spring. When "half hardy annual" is mentioned, it means that the seed cannot be sown outdoors before warm weather sets in. When the word "perennial" is mentioned, it means flowers that will bloom the second year from seed, although some perennials will bloom the first year from seed. Perennials are divided into "hardy" which do not winterkill, "half hardy" which must be protected over winter. ANNUALS bloom and die the same year, perennials live for many years. BIENNIALS are flowers that you sow one year to get bloom the following year. After blooming, the biennials die and must be sown again if their flowers are wanted. CLIMBERS are vining plants used for covering porches, etc. Finally GREENHOUSE plants which the beginner generally cannot raise with much success. If you want to grow flowers in a greenhouse and do not know how, before you do, hire yourself to some florist and read Fritz Bahr's "Commercial Floriculture" which book can be had from The A. T. De La Mare Company, New York, N. Y. Reading on flowers, you will run across such terms as: rock plant, stove plant, foliage plant, etc., which terms will be plain to you after some studying, which you will have to do in order to be a success as a flower grower.

FLOWERS AND GRASSES FOR DRYING

FLOWERS: *Acroclinium*, *Ammobium*, *Celosia Plumosa*, Chinese Woolflower, *Catanache*, *Echinops*, *Eryngium*, *Gomphrena*, *Gypsophyla paniculata*, *Helichrysum*, *Lunaria*, *Physalis*, *Rhodante*, *Statice*, *Xeranthemum*, *Carthamus*.

GRASSES: *Agrostis*, *Briza*, *Tricholaena*, *Coix*, *Erianthus*, *Lagurus*, *Pennisetum*, *Stipa*. Cut the flowers before they are fully developed, when they commence to open, as they will fully open during the drying process. The material cut and the foliage stripped off, the stems should be tied in small bunches and hung with the heads downward in a cool, dark, dry and airy room, except *Physalis* which must be hung up to dry in a horizontal position, so that the lanterns would not cling close to the stem.

WINTER BLOOMING FLOWERS

To have flowers for Christmas sow Snapdragons in June-July, *Begonias* in July, *Cyclamen* 16 months previous to Christmas, *Cleveland Cherry* and *Dwarf Pomegranate* in December to early in January. Christmas Pepper January to March, *Coleus*, *Stuttgartia Cherry*, March-April, *Calendula* in September, *Freesia*, pot up in August, use largest sized bulbs, *Mignonette*, sow in August, *Nemesia*, sow in August, *Oxalis Rosea*, sow in September, *Primula Chinensis* and *Obconica*, sow in April, *Primula Malacoides* in July, *Pansies*, sow July-August, *Saintpaulia* in June, *Stephanophyllum* in August, *Myosotis Christmas Boquet* in May-June, *Schizanthus* in September, *Early Wonder* and *Kewensis Wallflower* in July-August. *Doronicum-Field* grown plants brought in and planted in fairly good soil Oct. 15, will bloom for Christmas. Stock *Early Harbinger* if sown July 10.

The following items described in this catalog are also winter-bloomers: *Alyssum*, *Anemone*, *Clarkia*, *Cynoglossum*, *Delphinium*, *Dimorphotoca*, *Digitalis*, *Gerbera*, *Gillia*, *Heliophila*, *Linaria*, *Lupin*, *Ranunculus*, *Swansonia*, *Trachymene*, *Trollius*, *Ursinia*, *Venidium*, *Cineraria*, *Centaurea Cyanus* and whenever mentioned as a "winter bloomer" in our descriptions.

Suitable for Shade

The following flowers of which we offer the seed can be successfully raised in partial shade: *Achillea*, *Aconitum*, *Aquilegia*, *Bellis*, *Campanula*, *Begonia*, *Colinsia*, *Fuchsia*, *Impatiens*, *Lobelia*, *Cardinalis*, *Mignonette*, *Mimulus*, *Nemophylla*, *Nierembergia*, *Pansy*, *Torenia*, *Thalictrum*, *Viola*, *Sweet Violet*, *Anemone*, *Astilbe*, *Digitalis*, *Bleeding Heart*, *Polemonium*, *Primula*, *Trollius*, *Achusa*, *Myosotidiflora*, *Myosotis* and *Doronicum*. For shady places nothing beats Hardy Ferns.

PLANTS FOR GRAVES

Many plants can be used for this purpose besides those on the list that follows. Plants of medium height suitable for the center and good for one season only: *Dwarf Ageratum*, *Cineraria Maritima*, *Geranium*, *Nigella*, *Lantana*, *Matricaria Capensis*, *Centaurea Gymnocarpa*, *Nierembergia*, *Petunias*, *Phlox Grfl.*, *Ten Weeks Stocks*. Perennials: *Aquilegia Coerulea* and *Rose Queen*, *Cheiranthus Allioni*, *Bleeding Heart*, *Dianthus Cyclops*, *Lychnis Haageana* and *Arkwrightii*, *Stokesia*, *Platycodons Mariesi*, *Peony Officinalis*. Annuals for border of graves: *Alyssum*, *Lobelia*, *Dwarf Marigold*, *Matricaria Golden Ball*, *Dwarf Phlox*, *Nolana*. For a perennial border use: *Bellis*, *Cerastium*, *Pyrethrum Golden Feather*, a most excellent plant for this purpose, *Dianthus Deltoides*, *Saxifraga*. Some of these plants spread and must be kept in shape by occasional trimming. For a solid cover use: *Gypsophyla Repens*, *Saponaria Occymoides*, *Saxifraga*, *Mahogany Clover* or *Vinca Minor*, the best plant of all for this purpose. Hardy Verbena.

CARPET BEDDING—As an answer to queries would say that to merely learn the names of plants suitable for carpeting means nothing, because carpet bedding is an art, must be understood, besides not being easy, it is an expensive form of gardening and will hardly ever become popular in this country. Those interested in carpet bedding should procure a book on this subject from A. T. De La Mare Co., New York, N. Y.

FOR DRY PLACES

Androsace, *Eriophyllum*, *Herniaria*, *Hieracium*, *Lindifolia*, *Phacelia*, *Portulaca*, *Whitlavia*, *Anthemis*, *Dianthus Deltoides*, *Dianthus Knappi*.

FOR HANGING BASKETS

Ageratum, *Begonia Semperflorens*, *Cuphea*, *Geranium*, *Helle-trope*, *Lantana*, *Lobelia Gracilis*, *Dwarf Marigold*, *Nierembergia*, *Petunia*, *Alyssum*, *Verbena*, *Coleus*, *Dracanea*, *Centaurea Gymnocarpa*, *Cineraria Maritima*, *Grevillea*, *Pyrethrum Golden Feather*. All named are upright growing plants. The following are trailing plants: *Maurandia*, *Linaria Cymbalaria*, *Thunbergia*, *Lobelia Pendula*, *Asparagus Sprengeri*.

FOR BORDER AND BEDDING

Very dwarf, 6 to 12 inches high: *Alyssum*, *Brachycome*, *Candytuft*, *Centaurea Candidissima*, *Myosotis*, *Lobelia*, *Mignonette*, *Pansy*, *Dwarf Compact Petunias*, *Dwarf Annual Phlox*, *Pyrethrum*, *Portulaca*, *Verbena*. Plants 12 to 24 inches high: *Ageratum*, *Amaranthus*, *Snapdragon*, *Asters*, *Balsam*, *Coleus*, *Cineraria Maritima*, *Centaurea Gymnocarpa*, *Dwarf Larkspur*, *Dwarf Marigold*, *Nasturtium*, *Phlox Grandiflora*, *Salpiglossis*, *Salvia*, *Scabiosa*, *Stocks*, *Vinca Rosea*, *Zinnia Gracilis*.

CLIMBING PLANTS suitable for covering porches, trellis work, walls, etc., see *Ampelopsis*, *Aristolochia*, *Balloon Vine*, *Cardinal Climber*, *Clematis*, *Cobaea*, *Cypress Vine*, *Dolichos*, *Gourds*, *Ipomea*, *Lathyrus*, *Maurandia*, *Mina*, *Nasturtium*, *Scarlet Runner*.

SICK PLANTS Whenever your plants get sickly, look for insects in and above the soil, and apply a remedy. However most troubles are caused by overwatering. If you will water ONLY when water is needed and then do so thoroughly, you will save yourself worry and money.

Protecting Hardy Plants

Straw, hay or manure is used in order to keep the frost in the ground till spring comes. Continued freezing and thawing causes the ground to heave, resulting in loss of plants, covering prevents that. It is important to cover the plants after the ground is frozen to a depth of 6 inches or more—not before. The covering should be light, a layer about 6 inches is right.

Government bulletin No. 1381, entitled "*Herbaceous Perennials*," may be had free on request to the Department of Agriculture, Washington, D. C.

Flowers For the South

Many customers ask us what flowers to grow in the South. Our answer: All flowers can be raised in the South and many that we in the North cannot raise on account of our severe winters. The only flowers that you should leave alone, no matter where located, are those that require constant moisture, shade, special soil, etc., and you happen to be unable to provide these conditions. If your first trial with flowers is not a success try again—perhaps you did not afford the plant right treatment. Learn by mistakes. The following flowers, most of them very beautiful, need protection over winter here in Iowa, but in the South do well without it and bloom profusely: *Anemone*, *Candytuft Gibraltarica*, *Cheiranthus Allioni*, *Chrysanthemum*, *Digitalis*, *Geum*, *Gerbera*, *Hedysarum*, *Hibiscus*, *Lavandula*, *Lobelia Cardinalis*, *Pentstemon*, *Platycodon*, *Violas*, *Salvias*, *Scabiosa Japonica*, *Trachelium*, *Tritoma*.

There is no end of varieties of flowers that do well in the South, the few named are especially choice and worthy of raising.

GREENHOUSE OWNERS Whenever you have trouble in growing crops under glass or outdoors, no matter whether the trouble is caused by some new insect pest or a new plant disease and you are at a loss as to what remedy to apply, write to: Department of Agriculture, Washington, D. C. State the nature of the difficulty in full and you will be advised promptly and absolutely free by experts. In some cases a government man will call and give you expert advice and help—absolutely free.

HOUSE PLANTS You will find a list of plants that are suitable as house plants under the heading: *MOTHER'S DAY* on another page of this catalog.

PLANTS FOR ROCK GARDENS

We offer the seed of the following perennial rock plants: *Alyssum*, *Saxatile*, *Arabis*, *Armeria*, *Campanula Carpatia*, *Candytuft Sempervirens*, *Catananche*, *Cerastium*, *Cheiranthus Allioni*, *Dianthus Deltoides* and *Plumarius*, *Geum*, *Heuchera*, *Gypsophyla Repens*, *Eryngium*, *Linaria*, *Lychnis Haageana*, *Myosotis*, *Oenothera*, *Oxalis Tropaeoides*, *Papaver Nudicaule*, *Pentstemon Grfl.*, *Platycodon Mariesi*, *Primula Auricula* and *Officinalis*, *Saxifraga*, *Stachys*, *Statice*, *Stokesia*, *Viola*, *Saponaria Occymoides*, *Yucca*, *Valeriana* and *Inula*. Hardy Ferns and *Myosotis* should be employed in shady parts of the rock garden, also in wet places. A few annuals suitable for rock work: *Abronia*, *Dwarf Ageratum*, *Asperula Setosa*, *Candytuft Umbellata*, *Eschscholtzia*, *Ice Plant*, *Nemesia*, *Nemophylla*, *Nolana*, *Petunia*, *Portulaca*, *Viscaria Cardinalis*.

BEE PLANTS—We sell the seed of the following honey bearing plants: *Sweet Alyssum*, *Centaurea Odorata Marg.*, *Clarkia*, *Echium*, *Candytuft Umbellata*, *Nigella*, *Scabiosa*. Others are: *Phacelia*, *Bartonia*, *Collinsia*, *Malope*, *Mathiola*. Real honey bearing plants are: *Clover*, *Buckwheat* also *Linden* or *Basswood tree*.

PLANTS SUITABLE FOR DEEP SHADE—*Cypripedium*, *Funkia*, *Gentian*, *Christmas Rose*, *Lily of the Valley*, *Ruscus*, *Veratrum*, *Asperula Odorata*, *Corydalis*, *Pachysandra*, *Trillium*, *Maiden Hair Fern*, *Ostrich Fern*.

CLARKIAS AND GODETIAS

To bring out the beauty of both these flowers you must grow them in rather poor soil. Clay or good soil mixed with lots of sand or sifted ashes is the thing. They also do well in partly shaded position. A successful grower says: Grow both these flowers in 3 in. flats, disbudding to one stem and keeping them wilted most of the time through lack of moisture. Both Clarkias and Godetias are flowers of striking beauty, but if supplied with plenty of water and grown in deep soil they are worthless.

GROW NEW FLOWERS

because it pays to do so. Where will you get these new flowers? You can get them from us. We offer the seed of many good ones, absolutely new and very superior. See our novelty pages.

MUST HAVE

perfect drainage when it comes to cactus. Poor to medium rich soil when it comes to Amaranthus. Godetias and Clarkias must have poor soil and kept thirsty, Blue Lace Flower must have some sand and a little of peat does it much good. Gypsophyla must have sunlight, never any shade, etc. There are many must haves, all are mentioned in cultural directions referring to each flower group. It is important to pay attention to these directions to avoid disappointment.

Seeds with **HARD SHELL** like canna, sweet peas, will sprout quickly if placed in ice cold water for 3 hours the water drained, the seeds dropped in boiling water for 3 to 10 seconds. Bring the water to boiling point, take off the fire, drop the ice cold seeds in, stir up the seeds with a spoon and immediately drain the hot water off. That cracks the shells.

FLORAL WORK of distinction. Use dyed fresh double gypsophyla. Select sprays on which not all the blooms have developed. The shorter the stems the quicker will the dye be absorbed. Make slanting cuts at the end of stems, place in the dye solution and when the color has been absorbed transfer into clear water. The most effective colors are blue, pink and orange.

HOW TO DYE FLOWERS

As an answer to numerous inquiries will say that, you use special dyes that you can get from firms advertising in the Florists' Exchange or Florists' Review. For further information write to: McClenahan Greenhouses, Oklahoma City, Okla.; Aljo Mfg. Co., New York, N. Y., 130 West 21st Street.

WET SOIL—Never put seed into wet soil. See to it that your flats and benches are well drained. In tight flats and benches the water cannot run off quickly, all the air in the soil is forced out, seeds suffocate and do NOT "come" up.

MR. FLORIST: Pentstemon Grfl. will make extra money for you. Potted and placed before the public when in bloom (May and June) will sell and advertise you far and wide, because new, never before seen by many, possessing rare beauty, exactly what lovers of flowers are looking for.

FORCING PERENNIALS—Use strong clumps, grow cool not over 45-50 degrees at night. Withhold water for the first 10-14 days. That gives your plants a chance to set their buds instead of making rampant growth of foliage.

FLORISTS will profit by growing perennials in places where now weeds are allowed to grow. In partly shaded places try: Achillea Perry's White, Violas, Hardy Sweet Violets, Veronica Gentianoides, Campanula Rutundifolia, Aconitum, Aquilegia Flabellata. In full sun: Anthemis, Campanula, Carpatia, Coreopsis, Dianthus Deltoides and Caesius, Gallardia Grfl., Gallardia Beautiful Star. This is an annual but seeds itself, is as good as a perennial. Pentstemon, Platycodon, Pyrethrum, Scabiosa Caucasica, Statice Dumosa and Latifolia, Thalictrum, Nepeta, Verbena Venosa, Achillea Tomentosa. Not one of the named needs any "babying" once planted will stay for years without care. From some you will be able to cut flowers; others will be of interest to visitors, you will have flowers inside as well as outside of your greenhouses. Your place will become **TWICE** the place of flowers that it is at present.

Cultural Directions for Ferns

Place in a flat, pieces of sod 2-3 inches thick. To kill weed seeds that may be contained in the sod, pour over the sod three or four times, boiling hot water. Then sow the spores **THINLY**. The pieces of sod must stand at all times in water so that moisture will reach the spores from below. You must not water overhead. Before and after the spores have germinated, the sowing must be kept in a warm greenhouse in shade. In a few days the sod will be covered with a thick mass of dark green and a few weeks after that seedlings will appear with fully developed leaflets, which must be transplanted into flats at first and when the seedlings are fairly strong and well developed, they are potted off singly. The soil to use is rich black soil with one-third of sharp sand mixed in. To avoid failure you must never permit the young ferns to suffer from lack of moisture. They must be kept in a warm greenhouse and at all times protected from the hot sun.

SEED GERMINATES SLOWLY

Whenever this mention is made, it means that you need not look for a stand before 6 to 12 months. Sow all such seeds in a flat, after sowing, fill up with sphagnum moss, place the flat in a shady spot, keep moderately moist. If you find that the seed is sprouted late in the fall, with freezing weather on the way, place the flat in a cold frame. Sprouted seed or very young and tender seedlings even of the hardiest perennials cannot go through freezing weather unharmed. Because it takes so long for the seed to "come up" is NOT a reason to abandon the idea of growing the plants. On the contrary it is a reason **TO GROW** such perennials because **MANY** will not bother with slowly germinating seed, there will be no overproduction and when the plants are finally finished you'll find it a paying proposition. It will pay you to wait for the results and whatever **PAYS** is worth doing.

ACONITUM, Dictamnus, Perennial Phlox, Hardy Primulas and Sweet Violet and Trollius should be sown late in November to get a full stand. The action of freezing and thawing greatly facilitates the germination of these seeds.

PLANTS IN FLATS

To get healthy, strong and deep green looking vegetable plants in flats for spring sales, lay on the bottom of each flat about an inch of rotted manure and soil on top. That will make your plants of even height, stocky, in a word, superior and better prices and more sales will be your reward. Do not pack the soil hard as that interferes with drainage. Healthy plants can be grown only in well-drained soil.

THE BEST SOIL for growing seedling plants is soil containing a good portion of sand or leaf mould. You can lift the seedlings from such soil without the loss of roots and your seedlings will grow after transplanting, without check.

WHAT IS A FLAT—When the word "flat" is mentioned in this catalog it means a shallow box, 18 inches long, 12 inches wide and 3 inches deep.

IN JULY seeds of cool weather plants (pansy especially) come up poorly or not at all in spite of generous watering. Avoid sowings in July as much as possible.

PANSY—To get neat plants full of bloom in May, sow the seed in our locality by the end of August, transplant October 1st. Many growers sow the seed earlier, their plants get too big and are hard to handle.

"Bad luck" excepted one ounce of Pansy seed will produce at least 10,000 seedlings and as high as 18,000.

VERY FINE seed such as begonia, etc., is easily germinated if the seed is placed on an earthen pan, the pan placed on a brick, the brick placed in a pan of water, the brick about half submerged in water and the whole thing placed under a bench. Cover the pan with a pane of glass and keep shaded. The brick acts as a wick carrying the water up to the earthenware pan, no overhead watering and no chance to lose the seed by washing out.

What is a Rock Garden?

To add "finishing touches" to large grounds, parks, drives, etc., rock gardens are laid out by placing rocks of irregular outline fairly close together, the spaces between filled with dirt, where rock plants are sowed or planted. On level ground place a boulder in the middle and group smaller rocks around it, on sloping ground arrange rocks so that the soil between will not get washed out in heavy rains. No "style" to be followed, the arrangement of the whole thing is a matter of individual taste.

TO MAKE GLADIOLI PAY

you must have them in bloom before and after the outdoor crop. Start planting January 15th and keep on planting at intervals of 15 days up to March 1st. You may plant in benches or beds and to save space, in pots, which you will place under the benches and on benches when well rooted and with about 8 inches of growth, about 30 to 40 days after potting. Plant again March 15th in pots, place the pots under the benches, when well rooted place the pots on the benches and transfer them to cold frames towards the end of April to get bloom towards the end of June or you may plant March 15th in solid beds in the greenhouse. Again you can start bulbs in April in pots and plant in the open when danger of frost is past. Also plant about April 1st and again April 15th in cold frames. You will have them in bloom long before the outdoor crop. Plant lightly for a crop of bloom to come in August and September and if short, you can always buy, as a rule, for less than the cost of production. For a crop of bloom in the late fall when outdoor crop is gone, asters about played out and mums not counting for much, plant early varieties from July 1st to 10th or even two or three weeks later in a sheltered spot.

PERENNIALS for ground covering: Abronia, Acanea, Arenaria, Dianthus Deltoides, Cerastium, Eriophyllum, Euphorbia, Myrsinites, Gypsophyla Repens, Herniaria, Lotus Corniculatus, Nepeta, Saxifraga, Shamrock, Spargula, Sweet Violet, Thymus, Verbena Venosa, Vicia Snowdrift.

For covering bare spots in the rock garden, banks, and any spot where because of heat and lack of moisture, hardly any plant would grow, try Thymus Serpyllum, a neat, low-growing plant that never becomes shabby looking and fills the atmosphere with highly pleasant spicy fragrance. Easy to grow from seed. Once started will stay for years.

HARDY CHRYSANTHEMUM especially such varieties as Mrs. C. L. Bell, Mayfield Giant, Shasta Daisy, any of the Leucanthemum branch, must be divided every other year and lined out in the field. Most of these Chrysanthemum when the clumps are over 2 years old die out. (They rot out). Dividing and lining them out, renews the life of the plants.

TIME TO SOW AND PLANT

under glass and outdoors. The exact date of starting this or that crop depends on the needs of the grower. Our table is only approximate.

JANUARY

Begonia, bedding
Asparagus P. & S.
Cleveland Cherry
Acroclinium, Anemone
Cyperus
Calendula, Candytuft
Blue Lace Flower
Cucumbers, forcing
Centaurea
Christmas Pepper
Cobaea, Cornflowers
Cineraria Candidissima
Dracanea
Erysimum
Gerbera, Godetia
Gladioli Primulinus
Grevillea
Gypsophyla Elegans
Helichrysum, Heliotrope
Hunnemania
Ipomea
Lettuce, Larkspur
Lobelia, Lupin annual
Maurandia, Mignonette
Moonvine
Nemesia, Nigella
Pansy for late bloom
Petunia Double
Perennials to pot up
Perilla, Poppies
Primula
Phlox Drummondii
Radish, forcing
Salvia, Saponaria
Schizanthus, Shamrock
Smilax, Snapdragon
Stocks for May bloom
Sweet Peas
Thunbergia
Tomatoes, forcing
Torenia
Verbena, Vinca
Wallflower

FEBRUARY

Abronia, Abutilon
Acroclinium, Agrostis
Ageratum, Agathe
Alyssum Amaranthus
Antirrhinum Alonsoa
Angelonia, Arctotis
Argemone, Asparagus
Aster early var.
Begonia, Bellis
Bleeding Hearts in pots
Brachycome, Browallia
Calandula, Celosia
Canary Bird Vine
Castilleja
Centaurea Calceolaria
Christmas Pepper
Cineraria foliage
Clarkia, Cleveland Cherry
Cobaea, Coleus
Crepis Cucumbers
Cyperus
Dahlia, Delphinium
Dimorphotoca
Dusty Miller, Dracanea
Echium, Egg plant
Erysimum, Eustoma
Eupatorium
Gaura, Gerbera
Gladioli, Godetia
Gypsophyla Elegans
Heliotropium
Ice Plant
Kochia
Lantana, Maurandia
Linaria Cymbalaria
Matricaria
Mesembryanthemum
Mimulus
Mimosa Pudica
Myosotis
Nemesia, Nemophila
Pansy, Penni-etum
Nigella, Nierembergia
Nolana
Perilla, Petunias
Perennials
Primula Chin
Primula Obo
Pyrethrum G. F.
Phlox Drum
Rhodante, Ricinus
Sarpiglosis, Salvia
Saponaria, Schizanthus
Shasta Daisy, Smilax
Snapdragon, Statice
Stevia Stipa
Stephanophysum
Sweet Peas
Tomato for heavy pot
plants
Trachelium, Tritoma
Torenia
Verbena, Vinca
Wallflower, Zinnia

MARCH

Acroclinium, Agathe
Ageratum, Agrostis
Alonsoa, Alyssum
Antirrhinum, Arctotis
Asters
Balsam, Barberr
Begonia, Bellis
Blue Lace Flower
Brachycome
Browallia
Calceolaria

Campanula, Candytuft
Canary Bird V.
Cabbage, Calliopsis
Start Caladium
Start Cannas
Centaurea
Christmas Pepper
Cauliflower, Celery
Cinnamon blts.
Celosia, Crepis
Cucumbers to force
Carnation, Clarkia
Cleveland Cherry, Cobaea
Cyperus
Dahlia tubers to make
cuttings
Dimorphotoca
Dolichos, Dracanea
Dusty Miller
Echium, Egg Plant
Eustoma, Erysimum
Hardy ferns to be
potted for spring
sales.

Genista, Gladioli
Hunnemania
Impatiens
Larkspur
Leptosiphon, Lobelia
Marigold, Matricaria
Maurandia, Mimulus
Mimosa Pudica
Myosotis
Nasturtium, Nemesia
Nemophila, Nolana
Nierembergia
Parsley
Poppy annual
Ricinus
Salvia, Salpiglosis
Saponaria, Scabiosa
Schizanthus
Shasta Daisy
Snapdragon
Stephanophysum
Stipa, Smilax
Stocks, Sweet Peas
Tomatoes
Thunbergia, Torenia
Trachelium
Start Tuberoses
Viscaria
Xeranthemum
Zinnia

APRIL

Acroclinium
Ageratum, Alyssum
Ampelopsis
Antirrhinum, Asters
Balsam, Barberr
Bellis, Blue Lace F.
Calendula, Celosia
Canary Bird V.
Centaurea, Clarkia
Cineraria, Cobaea
Conifers, Cornflower
Cinnamon V. Blts.
Coleus, Cynoglossum
Crepis
Helichrysum
Hunnemania
Gyp. Elegans
Gladioli, Gentista
Larkspur, Lobelia
Leptosiphon
Marigold, Matricaria
Mulberry
Petunia single sorts
Poppy Oriental
Primula
Poppy Shirley
Salvia, Saponaria
Scabiosa, Smilax
Schizanthus, Shamrock
Snapdragon
Verbena, Viola
Viscaria
Wallflower, Wistaria
Xeranthemum
Zinnia and other an-
nuals.
Thunbergia

MAY

Ampelopsis
Annuals all kinds
Asters
Biennials all kinds
Campanula
Cinnamon Vine
Mulberry
Cineraria, Crepis
Centaurea Americana
Nolana
Gladioli
Gyp. Elegans
Plant Dahlias
Perennials
Scabiosa Japonica
Xeranthemum
Saintpaulia
Saponaria
Viola, Viscaria
Wallflower, Wistaria
Zinnia
Conifers
Poppy Oriental

JUNE

Annuals
Calceolaria

Gladioli for late bloom-
ing.
Gypsophyla Elegans
Lupin, Perennials
Saintpaulia
Trachymene
Wallflower

JULY

Antirrhinum
Annuals
Calceolaria
Calliopsis, Cineraria
Cyclamen
Gladioli for late bloom
Grevillea
Gyp. Elegans
Hunnemania
Myosotis
Prim. Malacoides
Perennials
Saponaria
Wallflower
Poppy Iceland

AUGUST

Anemone, Asparagus
Begonia, Bellis
Browallia
Calendula, Cineraria
Calceolaria
Clarkia, Cyclamen
Cyperus
Grevillea
Heliophila
Linaria Lupin
Lobelia Card.
Mignonette Myosotis
Nemesia
Pansy, Primulas
Physalis Fran.
Perennials
Ranunculus
Stephanophysum
Sweet Peas
Trachelium, Trollius
Wallflower
Poppy Iceland

SEPTEMBER

Achillea, Alyssum
Asparagus
Begonia, Bellis
Blue Lace Flower
Browallia
Calendula, Carnation
Calceolaria
Cineraria, Clarkia
Cyclamen, Cyperus
Cynoglossum
Delphinium
Gaillardia annual
Heliophila
Lettuce, Linaria
Lobelia Card, Lupin
Mignonette
Myosotis
Oxalis
Pansy, Petunia
Physalis, Plant Iris
Plant peonies and
perennials
Salpiglosis
Schizanthus
Snapdragon
Stocks, Sweet Peas
Sow perennials in
frames

OCTOBER

Achillea, Asparagus
Begonia, Bellis
Browallia
Calendula
Calceolaria
Cineraria, Clarkia
Cleveland Cherry
Coreopsis
Cyclamen, Cyperus
Delphinium
Doronicum, Dracanea
Gaillardia annual
Heliophila
Ligustrum, Lupin
Linaria, Lettuce
Oxalis
Pansy, Petunia
Pentstemon
Perennials
Schizanthus, Smilax
Snapdragon
Statice, Stocks
Sweet Peas
Vinca

NOVEMBER

Antirrhinum
Ageratum
Asparagus P. & S.
Begonia
Bellis
Calendula, Clarkia
Calceolaria
Carnation
Cineraria, Cyclamen
Cleveland Cherry
Delphinium
Doronicum, Dianthus
Dracanea
Gillia, Glorinia
Heliophila

Larkspur, Lettuce
Liatris outdoors
Linaria, Lupin
Mignonette, Myosotis
Nierembergia
Pentstemon, Pansy
Petunia, Double
Primula, Pomegranate
Perennials, outd.
Schizanthus, Smilax
Snapdragon, Stocks
Sweet Peas
Trollius Trachelium
Radish, forcing
Ligustrum
Vinca

DECEMBER

Achimenes
Alyssum, Aralia
Asparagus
Begonia Tuberosus
Bellis
Start Bleeding Hearts
in pots
Browallia
Calendula, Calliopsis
Centaurea, Clarkia
Cleveland Cherry
Cobaea, Coleus
Cornflower, Candytuft
Chrysanthemum
Cyclamen, Cyperus
Delphinium
Dimorphotoca
Doronicum, Dracanea
Gloxinia, Godetia
Gyp. Elegans
Gomphrena, Grevillea
Heliophila, Hunnemannia
Ipomea

Kalanchoe
Larkspur, Linaria
Lilium Formosanum
Lobelia, Lupin
Moonvine, Myosotis
Nierembergia
Pansy, Perennials
Phlox Drummondii
Primula
Pot up Glads
Pyrethrum Aureum
Salvia, Scabiosa
Schizanthus, Smilax
Snapdragon, Statice
Streptocarpus, Stocks
Sweet Peas, Shamrock
Thunbergia, Torenia
Verbena, Vinca

PERENNIALS FROM SEED

As a rule it takes a perennial some time to "come up." Certain perennials like phlox, dictamnus, trollius, etc., are especially slow in coming up. But once up, they are in this world to stay for many years. Other perennials, are of a quick growing nature. The seed sprouts readily and speedily a flowering plant is developed. This is very gratifying to us gardeners but the thing has a reverse side, namely that these easily raised plants take their departure from this world as easily as it was to raise them. So if a perennial is slow in coming up, if you have to wait long for the bloom do not mind it, as you will be rewarded by the plant's longevity. The slow grower will stay with you, will be easy to transplant, and when you sell a plant, it will grow for your customer, he will be satisfied and you will do more business with him and his friends.

Certain perennials raised from seed, when in bloom for the first time, do not come anywhere near the mark. They were described as gorgeous, as magnificent, but they do not look that way to you at first. These belong to a class that do not show their beauty at first, but they will later, when two or three years old and well established. Some of these are wonderful if left undisturbed long enough. Therefore, to judge a perennial too soon, would not be fair in these cases.

Many perennials are described as perfectly hardy, yet you have lost them, they winter-kill. Perennials will winter-kill if the plants are young, in their first year of development, and not given protection. But given a light covering of straw, hay or other coarse material the first winter, will from then on, survive any amount of cold and unfavorable winter conditions. Make it a rule to protect seedling perennials over winter. Once established most perennials need no protection whatever.

Sow the seed of perennials in an open frame. The advantages of sowing in an open frame are: You can flood the frame with water, thereby getting the most of watering, the seed will stay in the frame, heavy rains cannot wash out and carry the seed away. If you are sowing during summer and sow in frames, you can easily shade your sowings with lath or burlap, you can keep out birds, cats, that do damage to open seed beds. If you are a beginner, do not expect ANY perennial to come as fast as a radish and if you will fail to get a stand, before you put the blame on the seed, ask yourself whether there might not have been some other cause. You will meet with the least amount of failure, if you will cover the seeds properly, not too much and as lightly as possible when the seed is small or light like statice, heuchera, etc., if you will keep your seed bed moist and during summer shaded with lath, burlap or muslin.

EARLY IN NOVEMBER just before the time when heavy frosts are due, you can sow the seed of perennials outdoors. The seed will lay unsprouted till spring and will germinate very easily in the spring, long before the ground is ready to work. You will get better plants that way, bloom sooner and save yourself lots of watering. The following list of flowers both perennial and annual are flowers which in our experience extending over many years NEVER failed to come up in the spring when sown late in the fall.

Aconitum, Ageratum, Alyssum, Anchusa, Anthemis, Antirrhinum, Aster hardy, Balsam, Calendula, Calliopsis, Candytuft, Centaurea, Clarkia, Clematis Panchulata, Coreopsis, Cosmos, Datura, Dianthus, Dictamnus, Dimorphotoca, Erysimum, Eschscholtzia, Euphorbia, Gaillardia, Gomphrena, Gypsophyla, Hesperis, Hunnemannia, Larkspur, Linaria, Linum, Liatris, Lupin, Mignonette, Nemophila, Nicotiana, Nigella, Pansy, Petunia, bedding, single flowering varieties only, Phlox both annual and perennial, Poppy, Portulaca, Pyrethrum Roseum, Pyrethrum Aureum, Pentstemon, hardy perennial varieties, Rudbeckia, Salvia Farinacea and Salvia Azurea Grandiflora, Sanvitalia, Saponaria, Schizanthus, Sweet Peas, Sweet Violet, Scabiosa Caucasica, Scabiosa Fisheri, Shamrock, Statice Dumosa, Latifolia, Sareptana and Suvorowi, Trollius, Viola, Viscaria and Verbena Venosa. Clematis Panchulata, Dictamnus, Phlox Decussata, Sweet Violet and Trollius are flowers of which the seed MUST go through frost before it will sprout and the seeds of these should be sown in the Fall.

Reliable Flower Seeds

PLEASE NOTE

That you may order half and quarter ounces at ounce rate, half and quarter pounds at pound rate. Our trade packets are double the quantity of retail packets and our retail packets are well filled and you will get your money's worth every time.

ABRONIA—SAND VERBENA

UMBELLATA GRFL.—Trailing Verbena with numerous clusters of sweet scented, rosy lilac flowers in June to November. Fine for borders, hanging baskets and rock work. Thrives in poor soil. Hardy annual, 6 in. tall. T. pkt. 10c; oz. 45c.

ABUTILON—FLOWERING MAPLE

Placed in 2 inch pots by April, carried outside over summer and put back on the benches in September will be in full bloom for Christmas. The bell-shaped flowers are in shades of pink, red and yellow. First class house plant, fine for beds, hanging baskets and as a border. Hardly ever out of bloom. The seed we offer are best varieties in mixture.

ACACIA—MIMOSA

Easily grown greenhouse plant. Sow the seed in January, soak in hot water for 24 hours. Pot off, use sandy soil and always give plenty of water. Plunge the pots in soil, keep the plants cool from 40 to 50 degrees. Never try to force it and you will have fine blooming plants in March and April. They make fine Easter plants. There is scarcely a thing in flowers more beautiful.

PODALYRIFOLIA—Early flowering, fine silvery foliage, producing elegant sprays of golden-yellow flowers in quantity. Of great value for cutting. Height 3 ft. 25 seeds 20c; 100 seeds 60c.

ACACIA DEALBATA—Large fern-like silvery leaves, flowers clear yellow, scented. Winter blooming sort. T. pkt. 10c; oz. 50c.

ACACIA LOPHANTA—(A. L. Speciosa Nana Compacta). Flowers pale yellow. T. pkt. 10c; oz. 50c.

ACACIA MIXED—Includes many dwarf compact growing varieties, the best there is in Acacia. T. pkt. 15c; oz. \$1.60.

ACANTHUS LUSITANICUS (Mollis)—An elegant, stately, hardy perennial. Protect North. Height 3 ft. T. pkt. 15c.

ACHILLEA THE PEARL

Easily raised, blooming from June to October and useful no matter for what occasion flowers are needed, doing well in any kind of soil both in shade or sun. Hardy perennial. Height 2 feet. If sown early will bloom the first season.

ACHILLEA FILIPENDULA, Parkers' variety. Furnishes an abundance of elegant, brilliant yellow flowers, first class for cutting either fresh or dried. In bloom in June and July. Hardy perennial. Height 3-4 feet. T. pkt. 10c; 1/8 oz. 40c; oz. \$3.00.

ACHILLEA TOMENTOSA AUREA—Forms a carpet of finely cut grayish green foliage, flowers golden-yellow in flat heads in spring and summer. Extra good rock plant, hardy and long lived if exposed to the sun and planted in light rather dry soil. Height 8 in. T. pkt. 10c; 1/16 oz. 25c.

ACHILLEA PERRY'S WHITE—Twice as large as Pearl, extra double snow-white, a real flower but produces no seed. Multiplies fast by plant division. Do not order the seed of this, we have none. Plants only, 3 for 45c; 10 for \$1.00, prepaid.

ADENOPHORA POLYMORPHA

Hardy perennial, spikes of fine dark blue flowers produced freely in midsummer. Of robust growth in any good garden soil. Fine for large beds, borders and large rockeries. Height 3 ft. T. pkt. 10c; 1/16 oz. 25c; 1/8 oz. 45c; oz. \$3.00.

ANTIGONON—QUEEN'S WREATH

Antigonon Leptosus is a handsome summer-blooming climber, doing well in a hot and sunny position, producing numerous sprays of rose pink flowers that every florist can use to advantage. Height 20 ft. Half hardy perennial. T. pkt. 10c; oz. 45c; lb. \$4.25.

ACONITUM—MONKSHOOD

Sow the seed late in the fall, in the open, just before the arrival of hard frosts to get a full stand of seedlings the following spring. If you will sow the seed in the spring handle the sowing as directed on page 60 of this catalog under the heading "Seed Germinates Slowly." Hardy perennial.

NAPELLUS—Long spikes of curiously shaped blue flowers, from July to October. Plant in shrubby or shady spots of the garden. Height 3 to 4 feet. T. pkt. 10c; 1/8 oz. 25c; 1 oz. \$1.40.

ACONITUM WILSONI (Barkers' Variety)—Regarded by many as the finest and most valuable of all Aconitums for cutting. The plants of exceptional robust growth, produce several massive spikes of large well-formed deep violet blue flowers of great beauty from September to frost. One of the choicest perennials. Height 6 ft. T. pkt. 30c; 1/16 oz. 50c.

ACONITUM FISCHERI—Exceptionally beautiful and of great value for cutting. The flowers are large, deep bright blue, a shade of blue that harmonizes well with other flowers, produced in dense heavy spikes so that three stalks make a large bouquet. Nothing finer for vases, baskets and made-up floral pieces. Blooms in August and September. Height 3 ft.

AETHIONEMA PERSICUM

A lovely rock and border plant that can easily be included in the 10 or 12 very best low growing hardy perennials. The plant forms a broad cushion covered with charmingly beautiful, pink flowers in April and May. The foliage is clean, neat, bluish-green, making the plant highly attractive in or out of bloom.

Easily raised from seed, perfectly hardy, doing well under gross neglect, withstanding any amount of heat and drought. Height 6 in. T. pkg. 25c; 1/32 oz. \$1.00.

AETHIONEMA GRANDIFLORA—Of neat compact growth, flowers lavender pink in June and July. Height 1 ft. Hardy perennial. T. pkt. 20c; 1/32 oz. 80c.



ACROCLINIUM NEW HYBRIDS Valuable Florist flower. (Strawflower). Flowers very large and double, twice as large as the flowers of the old type, in many bright colors, produced from June to frost. Easily raised in almost any kind of soil in full sun. Tender annual. Height 20 in. T. pkt. 10c; oz. \$1.00; lb. \$12.00.

AGATHEA COELESTIS

BLUE MARGUERITE, BLUE DAISY—Flowers single 1 1/2 inches across of exquisite sky blue, produced in quantity all summer and all winter under glass. Fine for pots, beds and as a cut flower. When cutting flowers cut away down to make the plants break from the bottom. Requires rich porous soil and full exposure to the sun. Temp. 40-45 degrees. When grown as a perennial in the greenhouse must be repotted every year. Height 18 in. T. pkt. 10c; oz. \$1.00.

AGROSTEMMA WALKERI—Large, single, bright dark purple flowers from May to September. Hardy perennial 25 in tall. T. pkt 15c; 1/4 oz. 25c.

Ageratum

AGERATUM—Fine for pots, bedding and cutting. Blooms in winter from seed sown in the fall and blooming plants for spring sales will be ready from seed sown in January and February. Tender perennial, treated as an annual.

AGERATUM MIDGET BLUE

Of very compact growth only 3 inches tall, the plants practically covered with dainty rich blue flowers. Starts to bloom early and keeps on blooming almost to frost. T. pkt. 20c; $\frac{1}{2}$ oz. 30c; $\frac{1}{8}$ oz. 50c; $\frac{1}{4}$ oz. 90c.

FAIRY PINK—Of same habit as the variety Little Blue Star. Color delightful salmon rose-pink. Height 5 in. T. pkt. 15c; $\frac{1}{16}$ oz. 25c; $\frac{1}{8}$ oz. 45c.

LITTLE PURPLE STAR—Deep bright purple. T. pkt. 10c; $\frac{1}{16}$ oz. 25c.

LITTLE BLUE STAR—The plants grow only 5 inches high and are literally covered with bright blue flowers during summer and autumn. T. pkt. 10c; oz. \$1.80; $\frac{1}{8}$ oz. 25c.

LITTLE SILVER STAR—Plants only 4 inches tall, covered with silver-grey star like flowers. T. pkt. 10c; $\frac{1}{8}$ oz. 25c.

IMPERIAL WHITE—Large pure white flowers, early and constant bloomer. This is the prettiest white Ageratum. Height 9 in. Oz. 40c; lb. \$3.20; T. pkt. 5c.

BLUE PERFECTION—Deep amethyst blue flowers, plants even in growth. Height 8 in. Oz. 40c; lb. \$3.20; T. pkt. 5c.

AGERATUM BLUE CAP—Clear, deep rich blue, plants dwarf, very compact, completely covered with bloom. Extra choice new variety. Height 5 in. T. pkt. 10c; $\frac{1}{8}$ oz. 30c; oz. \$2.00.

BLUE BALL—An improved Blue Perfection. Plants very compact. Pkt. 5c; oz. 40. Height 6 in.

AGERATUM GIANT OF IOWA Immense heads of flowers in quantity from June to frost. Plants of compact upright growth 30 in. tall. T. pkt. 10c; oz. 80c.

TALL AGERATUM MIXED—Fine large flowered, white and blue, unexcelled for flower work and as cut flowers. Height 2 ft. T. pkt. 10c; oz. 60c.



Ageratum Little Purple Star

AGROSTIS NEBULOSA—CLOUD GRASS

Ornamental grass useful for mixing with cut flowers, fresh or dried, blooming in July and August. Annual. Height 18 inches. Sown outdoors late in October produces the following spring exquisitely dainty, long stemmed heads as pretty as any known gypsophyla. T. pkt. 10c.

ALLIUM Hardy, easily raised, bulbous plants thriving in any soil with good drainage in full sun. When cut, the flowers "stand up" for several days out of water and are widely employed in floral work by the florists in Europe. Can be forced to bloom in winter. In this country used mostly in rockeries.

ALLIUM STELLATUM Flowers globular, rosy pink, two inches through, borne on stout stiff stems two feet long in August and September. Height 2 ft. Valuable cut flower. Will stay fresh for days out of water. **BULBS**—10 for 50c, prepaid. T. pkt. 10c; $\frac{1}{8}$ oz. 35c.

ALONSOA GRANDIFLORA

A. Warszewicz Compacta. An easily raised annual fine for bedding, rockeries and pots. Flowers large tomato-red. Under glass, blooms in winter. Height 1 ft. T. pkt. 10c; oz. 60c.

WE ARE GROWERS

We operate two farms and grow many varieties of vegetable and flower seeds. You are buying from the growers when you buy from us.



Annual Alyssum

CULTURE—Sow the seed as soon as the ground is in workable condition. Cover the seed $\frac{1}{4}$ inch and have the plants stand a foot apart. They will do well in almost any soil. For winter blooming sow the seed under glass early in September. When out of bloom cut back and the plants will produce till frost.

ALYSSUM SWEET—T. pkt. 5c; oz. 20c; lb. \$3.00.

SNOWCLOTH—Choicest stock, seed saved from selected, transplanted plants with snow white flowers without a trace of green. Will satisfy the most fastidious gardener. Each plant absolutely flat, a solid mass of glistening whiteness. T. pkt. 10c; oz. 50c; lb. \$6.00.

ALYSSUM LITTLE GEM—Very dwarf, only 3 to 4 inches in height. A single plant will cover a space a foot in diameter. Densely studied from spring until fall with beautiful spikes of deliciously fragrant flowers. T. pkt. 10c; oz. 50c; lb. \$5.00.

ALYSSUM LILAC QUEEN—Dwarf and compact. flowers of pretty deep lavender color. T. pkt. 10c; oz. 60c; lb. \$6.00.

CARPET OF SNOW—Dwarfest and daintiest of its class. The neat round plants are a sheet of white bloom raising only two inches above the ground and make the most beautiful edgings imaginable. T. pkt. 10c; oz. 60c; lb. \$6.00.

ALYSSUM VIOLET QUEEN Plants dwarf and compact, neat in habit, free flowering and the small sweetly scented flowers are a very rich deep shade of violet. Height 4 inches. T. pkt. 10c; oz. 80c.

Perennial Alyssum

The seed of all hardy Alyssum is best started from May till September. From this sowing you will get nice plants for spring sales.

ALYSSUM SAXATILE COMPACTUM—(Basket of Gold.) Flowers brilliant golden yellow completely hiding the foliage. Height 9 inches. Enjoys sun, and not too much moisture. Hardy perennial. T. pkt. 10c; oz. 60c; lb. \$7.00.

ALYSSUM ROSTRATUM—Hardy perennial rock plant producing quantities of yellow bloom from June to September. Height 15 in. T. pkt. 10c; $\frac{1}{8}$ oz. 20c; oz. \$1.40.

ALYSSUM SINUATUM—Vigorous hardy perennial producing masses of sulphur yellow bloom in May and June. Height 15 in. T. pkt. 10c; oz. \$1.00.

ALYSSUM SERPYLLIFOLIUM—Fine hardy perennial rock plant with silvery gray foliage and pale yellow flowers in racemes during April and May. Height 6 in. T. pkt. 20c.

MOELLENDORFIANUM—An extra choice, compact growing hardy Alyssum forming dense cushions of silvery foliage foot across, covered in May and June with vivid yellow bloom of unusual beauty. Height 4 in.

ALSINE PINIFOLIA

A choice hardy perennial of neat growth, blooming in April and May if the plants are started early. The plants resemble miniature pine trees in growth and are covered with elegant snow white blooms in June and July when set in a rockery or used for bedding. Does best in sandy ground and fully exposed to the sun. Height 6 in.

ALSTROEMERIA

ALSTROEMERIA CHILENSIS (A. Pulchella)—Hardy Amaryllis. An extremely pretty half hardy bulbous plant, flowers large trumpet-shaped in umbels deep pink to red from May to October. Fine for cutting, bedding and as a pot plant. Requires rich, perfectly drained soil, partial shade and during hot weather lots of water. Easily raised from seed which, however, lays long and germinates unevenly. Height 3 ft. T. pkt. 20c; $\frac{1}{4}$ oz. 45c.

AMPELOPSIS—BOSTON IVY—CLIMBER

VETCHII—A hardy perennial climber with green leaves, which turn to scarlet in the fall. Clings firmly to the smoothest surface of rock or wood. Height 30 feet. T. pkt. 10c; oz. 50c; lb. \$3.20.

ANCHUSA MYOSOTIDIFLORA

Of neat compact growth, not over 20 inches high, with fine, heart shaped foliage and bearing quantities of deep blue forget-me-not-like flowers. Valuable because it blooms during April and May, is fine for cutting and an excellent rock plant. T. pkt. 20c.

ANCHUSA ITALICA—"Dropmore"—Hardy perennial, bearing all summer flowers of the richest gentian blue. Height 4 feet. T. pkt. 10c; oz. 80c; lb. \$8.60.

ITALICA FELTHAM PRIDE—Of neat compact growth, completely covered with very large, closely placed, extremely bright deep blue flowers from June to September. Very effective. Height 2 ft. T. pkt. 15c; ½ oz. 30c.

ANCHUSA CAPENSIS BLUE BIRD Plants of neat compact habit producing masses of brilliant intense dark blue flowers in sprays that are excellent for cutting. Very attractive. Annual. Height 20 in. T. pkt. 10c; ½ oz. 30c.

ANDROSACE CORONOPIFOLIA

Hardy perennial, flowers snow white, in large umbells, very graceful, from April to end of June. Fine pot and rock plant for sunny positions. Seed lays long before it germinates. Best time to sow the seed is in July and August. Place the sowing outdoors the seed will be up early next spring. Height 6 in. T. pkt. 15c; ¼ oz. 25c; oz. \$2.40.

Anemone-Windflower

The best time to sow is in January to March and again in August and September. The seed lays for some time before it germinates. Start in flats filled with a mixture of garden soil and leaf mould. Sow thinly, cover the seed lightly and set out or pot up the seedlings when they are large enough to handle. In the South and on the Pacific coast, Anemones are left outdoors at all times. In the North the corms are best stored in a dry, cool frost-free place over winter. Anemones are tuber forming plants of rather fantastic shape. It is hard to tell which is the bottom and the top of the corm. The top is indicated by its fuzzy character, the remains of the previous year's growth. When planting, be sure that you are placing the corms correctly, top up, and not down. Anemones are flowers of outstanding beauty, high class for cutting, pots, rockeries and beds.

ST. BRIGID—The flowers are 3 to 5 inches across, single, semi-double and produce in great abundance in April to June. The colors are of all shades, and markings, scarlet, pink, maroon, purple, lilac, striped, mottled, etc. It is one of the most gorgeous flowers unsurpassed for cutting. Height 15 inches. Hardy perennial. Year old corms of this Anemone started late in August will bloom late in December and January. Temperature 45 deg. T. pkt. 15c; 1/16 oz. 50c; ½ oz. 90c.

ST. BRIGID THE GOVERNOR—Double bright scarlet. T. pkt. 15c; ½ oz. 40c; oz. \$3.00.

ANEMONE SYLVESTRIS—Beautiful and very useful variety, producing quantities of large, pure white flowers, on stout stalks, resembling the bloom of snowdrops. A first rate cut flower, fine for rockeries and a readily saleable plant. In bloom from May to July. Height 12 in. T. pkt. 10c; ½ oz. 30c; oz. \$2.00.

ANEMONE CAEN—Also known as Coronaria, Chinese or French Anemone. Very showy, of the same usefulness and same habit as St. Brigid. Flowers single, large in many colors. MIXED. T. pkt. 10c; ½ oz. 20c; oz. \$1.00.

ANEMONE JAPANESE—Beautiful specie and highly valuable for cutting. Equal in keeping qualities to Gerbera. Flowers single or semi-double, three inches across born on long stems. Perennial and hardy and long lived if planted in well drained location and slightly covered over winter with straw or strawy manure. Blooms in August till frost. Prefers shade and loves moisture. It is easily raised from seed that should be sown in spring and that germinates in 30-60 days. Worth all the trouble of raising. We offer two varieties mixed. One an extra large white, the other rich pink.

ANEMONE PULSATILA—Produces in April and May single, violet-lilac flowers almost 3 inches across. Valuable for spring sales, first rate rock and border plant. Requires well drained soil in full sun. Height 10 in. T. pkt. 10c; ½ oz. 35c; oz. \$2.00.

ANTHEMIS—HARDY MARGUERITE

ANTHEMIS PERRY'S variety. High class for cutting. Flowers extra large, daisy like, golden yellow. Height 30 inches. T. pkt. 10c; oz. 40c; lb. \$4.00.

NEW HYBRIDS—Large daisy-like flowers, first class for cutting, in shades of dark and light yellow as well as pure white. Height 30 in. T. pkt. 10c; ½ oz. 20c.

ANTHEMIS MONTANA Drought and heat resisting perennial rock and border plant, producing from April to July, masses of beautiful pure white flowers. Height 10 in. T. pkt. 10c; oz. \$1.00.

AMARANTHUS SUNRISE Strikingly beautiful. Red, yellow and dark green foliage, each branch terminating with a brilliant large scarlet, carmine head. Fine for groups or singly. Space foot apart. Requires full sun and soil not too rich. Hardy annual. Height 3 ft. T. pkt. 10c; oz. 60c; lb. 6.00.

AMMOBIUM ALATUM GRANDIFLORUM

An attractive heat and drought resisting hardy annual straw-flower, with silver white aster-like flowers. Sow early in the spring to where the plants are to stand. Height 3 ft. T. pkt. 10c.

ANAGALIS COERULA

A showy floriferous heat and drought resisting, sun loving annual for beds, edgings, rockeries, window boxes and pots. Flowers star shaped an inch across bright deep blue from July to October. Start the seed from February to May. Height 8 in. T. pkt. 10c; oz. 80c; lb. \$10.00.

TO PROLONG THE SELLING SEASON make a display

on your premises of summer flowering plants. New plants or old plants of striking beauty that in spite of their worthiness are almost unknown. These old plants will act as novelties in most cases. Mass them in beds, place the plants in pots so that you can handle the plants easily when a sale is effected. Bury the pots in the ground. We would not display Petunias, Zinnias and other such in quantity. While these make your place look nice they do not create sales during summer. Have potted plants in reserve to replace those sold or whole beds of flowers that are through blooming. When for instance Pentstemon Grandiflorus is out of bloom replace it with Gaillardia Burgundy or whatever you may have in full bloom. Thus you can have on display several different flowers before frost arrives. You will make sales and will advertise your wares very efficiently. We suggest a few plants that we are sure will sell during summer. Achillea Perry's White, Armeria, choice specimens of even height, Calliopsis Dazzler and Garnet, Campanula Glomerata Superba, Celosia Fire Feather, Dianthus Deltoideus Brilliant, Dianthus Caesius Splendens, Gaillardia Burgundy, Gaillardia Beautiful Star, Gypsophyla Flowering Carpet, Gypsophyla Oldhamiana, Linum Cloth of Gold, Lychnis Chalcidonica Grfl., Mimulus Tigrinus, Pentstemon Grfl., Pentstemon Sensation, Pyrethrum Uliginosum, Scabiosa Caucasica, Scabiosa Fisheri, Sweet William Black Princess, Torenia, Variegated Yucca. And while trying this and if space will be available display a large bed of Larkspur Rosemond. We assure you that there will be many passers by that will stop and much talk created about your flowers.

ANTIRRHINUM ROYAL ROSE Spikes dense, individual flowers very large, well placed, highly attractive. Color the deepest, richest rose-pink that one can imagine, enhanced with a velvety sheen. A bed of Royal Rose is a royal sight. Half-dwarf. T. pkt. 20c; ½ oz. 80c.

ANTIRRHINUM ST. GEORGE Produces dense spikes of large individual flowers of glowing orange cerise in quantity. One of the finest varieties for bedding, the plants being very erect and sturdy. Half dwarf. T. pkt. 20c; ½ oz. 80c.

SNAPDRAGON CHRISTMAS GEM Only 9 inches tall, color rich deep pink. The finest dwarf snapdragon. You can have fine plants in pots ready for Mothers Day from January sown seed. T. pkt. 10c; ½ oz. 40c.

DOUBLE ANTIRRHINUM In Europe, Double Snapdragon is coming to the front as a cut flower. In time to come Double Snapdragon will be in demand in this country. If you want to experiment in this new class of Snapdragon you can do so with little expense. We offer a mixture containing several distinct colors at very reasonable price. What we offer is large flowered, tall type, with plants 30 inches tall. The seed produces about 60% of double flowers, the rest are large flowered singles.

Half Dwarf Snapdragon—Height 18 in.

NELROSE—Salmon pink.
FIREFLAME—Scarlet, throat white.
QUEEN OF THE NORTH.
CRIMSON QUEEN—Crimson.
DAPHNE—Soft blush pink.
DEFIANCE—Orange red.
FAWN—Pink and yellow.
ROSE QUEEN—Rich rose.
PEERLESS PINK—La France pink.
SILVER PINK—True.

FIREBRAND—Bright scarlet.
GOLDEN QUEEN—Rich yellow.
RUBY—Ruby red.
DARK SCARLET.
FIREFLY—Scarlet and white.
CARMINE QUEEN—Rosy carmine.
MONT BLANC—Pure white.
MIXED—All colors.
BRONZE QUEEN—Golden bronze.

ANY OF THE ABOVE—1 oz. \$1.50; lb. \$20.00; T. pkt. 15c; ½ oz. 30c.

Antirrhinum—Snapdragon

Perennials, flowering the first year from seed.

The seed may be sown outdoors early in May and will produce blooming plants from July to frost. For early flowering sow in the house or frames in February or March. Cover the seed very lightly. Set the plants 9 inches apart.

GREENHOUSE CULTURE—To get a crop for Christmas sow from June 25 to July 31, depending upon the time you wish to bench the plants. Sow in August to get flowers for Mother's Day. Use well prepared LOOSE soil, cover this with a thin layer of fine clean sand, then sow the seed and be sure to cover the same very lightly. Covering the seed too deep and overwatering before or after germination, will mean a poor stand. When your plants are large enough, put them into 2½ inch pots, use sifted sod soil, that contains no fresh manure. Pinch the plants once and allow 6 to 8 breaks to grow on each. Early in September the plants will be nearly pot bound and it is time to place them into benches 10 inches apart. Remove all suckers and prune the shoots at the base of the plants if they should crowd one another. Provide carnation supports early. Temperature 58-60 degrees at night. To prevent rust never allow water to touch the foliage even when the plants are first potted.

You will never have any trouble with rust or disease if you will water carefully, not crowd the plants and ventilate, but if rust should appear write for bulletin No. 221 to Agricultural Experiment Station, Urbana, Ill.

SNAPDRAGON for a winter crop. Says an experienced and successful grower: For a winter crop we pinch the plants 10 days after they go into the bench. We allow four inches of rich and porous soil and plant closely, never farther apart than 6x6 inches. This makes the plants grow tall and while we get only a few spikes per plant these are well flowered. After the first crop is cut the plants send up another bunch of shoots which are tall when in bloom and all of them first class stock.

TALL SNAPDRAGON—Height 24 to 36 in.

APPLEBLOSSOM—Pink and white.

ROSE—Brilliant rose pink.

WHITE—Pure white.

GARNET—Deep velvety red.

PINK—Delicate pink.

SCARLET—Bright.

YELLOW—Rich yellow.

GOLD—Rich dark yellow.

SALMON—Salmon-rose.

MIXED—All colors.

ANY OF THE ABOVE—1 oz. \$1.80; lb. \$20.00; T. pkt. 15c; ¼ oz. 30c.

SNAPDRAGON SPECIAL MIXTURE

Includes all the Giant, Half-Dwarf Snapdragon varieties as well as many new sorts. T. pkt. 15c; oz. \$1.80; lb. \$20.00.

Antirrhinum Rustproof

The seed we offer has been proved to be 75% rustproof. We offer a superior mixture containing a higher percentage of the more desirable light colors than will be found in other mixtures now on the market, namely canary yellow, rose pink, salmon pink, white with a dash of red and orange shades. **DE LUXE MIXTURE**. T. pkt. 20c; ¼ oz. 30c; oz. \$2.00.

RUSTPROOF ANTIRRHINUM PINKIE—Robust growing, large and very early flowering florists' forcing variety producing numerous fine cutting spikes with well spaced florets of brilliant pure clear rose. Comes 90% resistant. Height 30 in. T. pkt. 20c; 1/16 oz. 40c.

RUSTPROOF ANTIRRHINUM CRIMSON—Fiery crimson. Both individual flowers and flower spikes of huge size. Maximum type snapdragon. Height 30 in. T. pkt. 20c; 1/16 oz. 40c.

RUSTPROOF ANTIRRHINUM SHASTA—Pure white early greenhouse forcing type. Height 2 ft. T. pkt. 20c; 1/16 oz. 40c.

RUSTPROOF ANTIRRHINUM YELLOW—Of same type of flower and habit as Ceylon Court. Throws 6 to 8 spikes to a plant. Height 30 in. T. pkt. 20c; 1/16 oz. 40c.

RUSTPROOF SALMON ROSE—Produces long base branching spikes containing clusters of florets 15 inches long of a pleasing shade of deep salmon rose. Height 30 in. T. pkt. 20c; 1/16 oz. 40c.

RUSTPROOF BRIGHT FLAME—Maximum type, flowers very large, bright flame red, throat waxy cream. Height 30 in. T. pkt. 20c; 1/16 oz. 40c; ¼ oz. 70c.

RUSTPROOF COPPER BOY—Maximum type, very large flowers, copper red with golden blotch on lower lip. T. pkt. 20c; 1/16 oz. 40c; ¼ oz. 70c; 1 oz. \$4.80.

RUSTPROOF SPARKLE—Maximum type, very large flowers, rich velvety glossy orange scarlet. Height 30 in. T. pkt. 20c; 1/16 oz. 40c; ¼ oz. 70c; 1 oz. \$4.80.

RUSTPROOF BRONZE SHADES—A blend of attractive bronze shades. Large flowered. T. pkt. 20c; 1/32 oz. 30c; 1/16 oz. 50c; ¼ oz. 90c.

RUSTPROOF PURPLE—See Antirrhinum Purple King in the Maximum section.

AMBER AND GOLD. Plants of exceptionally robust growth, base branching, flowers glistening golden amber (terra-cotta color). Rust resistant. Height 18 in. T. pkt. 20c; 1/16 oz. 40c; ¼ oz. 70c.

ANTIRRHINUM DU BARRY. Color brilliant flaming rose a self color with a large spot of golden yellow on the lower lip. Plants compact, base branching. Massed in a bed creates a veritable sensation and as a cut flower is unrivaled. Rust resistant. Height 18 inches. T. pkt. 20c; 1/16 oz. 35c; ¼ oz. 60c; oz. \$4.00.

WE FILL ALL SEED ORDERS THE SAME DAY AS RECEIVED



Antirrhinum Pumillum

DWARF TOM THUMB SNAPDRAGON

MIXED—Large flowered varieties. Height 8 to 15 in.

ANTIRRHINUM ROCK HYBRIDS

A new race of snapdragons forming compact, rather small plants. These are profuse bloomers and bloom earlier than other "snaps" staying in bloom the whole season. Excellent for rock and alpine gardens. The bloom is produced from the ground up to the tips of plants, almost completely hiding the foliage from view. Many colors mixed. Height 6 in. T. pkt. 10c; 1/16 oz. 20c; ¼ oz. 35c.

Antirrhinum Majestic

Represents the furthest advance in Antirrhinums. The flowers as well as flower spikes are of maximum size, the placement of individual flowers is ideal. Height 18 to 24 in.

MAJESTIC CELESTIAL—Plants compact flowers very large in a huge bouquet of exquisite salmon rose shade.

MAJESTIC CHERRY—Cherry-red, very rich color.

MAJESTIC GOLDEN DAWN—Exceptionally vigorous in growth. Color golden-buff, overlaid salmon-pink. A magnificent flower.

MAJESTIC ROSE MARIE—Rich rose, golden center.

MAJESTIC ROSE BEAUTY—Pure rose pink self of extraordinary brilliancy.

MAJESTIC SNOWSTORM—Flowers extra large, snow-white, early flowering, valuable for forcing under glass.

MAJESTIC SUNSET—Bright terra-cotta shading into rosy-salmon.

MAJESTIC TWILIGHT—Flowers of enormous size, color a blend of rich gold with terra cotta. Will bloom under glass in the early spring months but not in mid-winter and is a cut-flower that is hard to beat.

MAJESTIC MIXED—Contains every variety listed by us, in proper proportion.

Any of the above: T. pkt. 20c; 1/16 oz. 45c; ¼ oz. 85c.

SNAPDRAGON BLACK DIAMOND

If you grow plants for sale to the general public, your sales will increase if you will grow for snapdragon plants our Black Diamond variety. The plants of Black Diamond are dark-greenish-red, entirely different from all other snapdragon plants. This unusual color makes the plants sell. Black Diamond has very large, dark red, almost black flowers. Height 20 in. Pkt. 15c; 1/16 oz. 35c; ¼ oz. 65c; ½ oz. \$1.20.

ARCTOTIS—AFRICAN DAISY

Annuals of easiest culture doing best in light soil with good drainage in a dry sunny location. Sow the seed from February to May.

ARCTOTIS GRANDIS—Blue Eyed African Daisy. Flowers daisy-like two inches across silvery white with blue center surrounded with a band of gold. First rate cut flower. Height 3 ft. T. pkt. 10c; oz. 80c; lb. \$8.00.

ARCTOTIS GIANT HYBRIDS—Flowers resembling those of Gerbera 2½ to 3 in. across in shades of apricot, bronze, brown, pink, red, scarlet, yellow besides pure white. Height 1 ft. Finest **FINEST MIXED**. T. pkt. 20c; ¼ oz. 40c; ½ oz. 75c; oz. \$5.00.

Giant Snapdragons

SPECIAL FLORISTS' STRAINS FOR GREENHOUSE FORCING

Height for all listed below 18 to 24 inches

AFTERGLOW—Color golden orange, the best golden bronze type. T. pkt. 50c.

BERTA BAUER—Orchid lavender shade. Does not shatter. T. pkt. 40c.

CHEVIOT MAID—Bright, clear rosy-pink flowers of perfect form, fine stems and VERY early. Exceptionally good and valuable for winter blooming. T. pkt. 40c.

CHEVIOT MAID SUPREME—Darker than Cheviot Maid, longer better stems. T. pkt. 40c.

CHERRY-RIPE—Rich, terra cotta red, deeply suffused, with cerise a bold outstanding color. T. pkt. 40c.

CEYLON COURT—A leader in yellow, early and long stemmed. T. pkt. 40c.

CEYLON COURT DARK—Deep golden-yellow, medium early. T. pkt. 50c.

COATES YELLOW PERFECTION—Extra early splendid forcer. One of the best. T. pkt. 50c.

ETHEL—Large flowered bright golden yellow. T. pkt. 50c.

GLORIOUS—Brilliant reddish copper with yellow lip a highly desirable combination of coloring. Extra early splendid forcer and free flowering. T. pkt. 80c.

HELEN—Beautiful bright salmon-pink, flowers large. Early. T. pkt. 40c.

JENNIE SCHNEIDER—An early, large flowering, and attractive salmon-rose pink, perfect in color, stem and shape of flower. T. pkt. 40c.

KEYSTONE—Large flowers, glowing dark scarlet. Fine, well formed spikes. T. pkt. 40c.

KLONDYKE SUPREME—Intense golden yellow. T. pkt. \$1.00.

LUCKY STRIKE—Medium early white. Does not shatter. T. pkt. 40c.

MARIE LOUISE—A beautiful shell-pink. T. pkt. \$1.00.

MAIDEN'S BLUSH—Light apple-blossom pink. T. pkt. \$1.00.

MONTANA-WHITE—Flowers of immense size glistening pure white on long spikes. Vigorous grower, extra early. heavy bloom producer even in midwinter. T. pkt. 50c. 65c.

NEW DEAL—Extra early fragrant golden bronze. T. pkt. 50c.

ROCK'S WHITE—Flowers of immense size pure white. T. pkt. 25c.

ROMAN GOLD—High class commercial variety, unusual in color, pink, copper and golden yellow blended together and simply charming. Very early. T. pkt. 40c.

ROSE QUEEN WITTERSTAETTER—The richest dark rose shade. T. pkt. 40c.

SUN TAN—Half dwarf winter-blooming bronze type, producing perfect flowers even in the dark days. Color a blend of deep pink, copper and yellow. T. pkt. 60c.

SUNSHINE—The darkest yellow of all snapdragons. Spikes tall and heavy. T. pkt. 50c.

TALISMAN—Bronze and golden shades. T. pkt. \$1.00.

VELVET BEAUTY—Deep velvety crimson. American Beauty Rose shade. T. pkt. 50c.

WELCOME—Large flowers of clear brilliant dark crimson, very showy. Foliage dark and attractive. T. pkt. 50c.

WHITE ROCK—Solid white, early, forces well. T. pkt. 25c.

WHITE WONDER—One of the finest pure white Snapdragons for greenhouse culture. T. pkt. 50c.

WINTER HELEN—Salmon-pink, early, fine forcer. T. pkt. 40c.

WINDMILLER'S CHRISTMAS CHEER—Beautiful, early, bright pink, fine for December. T. pkt. 50c.

WINDMILLER'S TRUE LA FRANCE—Soft pink. T. pkt. \$1.00.

ANTIRRHINUM GOLIATH MIXED—Includes all the above greenhouse forcing varieties in proper proportion. T. pkt. 25c; 1/8 oz. 50c.

IN EVERY CASE when price is not quoted for any item in this catalog it means that we are unable to supply that seed at the present, owing to war conditions.

Antirrhinum Pumilum

At present the highest type of bedding Snapdragons. Of exceptionally compact growth, the plants covered with bloom from the ground up. A bed of Pumilum is a solid mass of bloom all summer. Grow plenty of Snapdragon Pumilum for spring sales. The plants sell better than the plants of other sorts because they are more attractive, bushy and full of vigor. The buyers can see the difference between the plants of ordinary snapdragons and the plants of Pumilum at sight. Height 1 foot.

APRICOT QUEEN—Apricot suffused rose-pink.

CARMINE QUEEN—Deep carmine pink.

CORAL QUEEN—Coral pink, throat white.

CRIMSON QUEEN—Dark crimson flower, foliage dark green.

LEMON QUEEN—Bright lemon-yellow.

ORANGE QUEEN—Glowing orange, throat white.

PINK QUEEN—Brilliant pink, throat white.

SCARLET QUEEN—Vivid orange-scarlet, striking color.

WHITE QUEEN—Glistening white.

PUMILUM MIXED—T. pkt. 20c.

(Cannot supply Pumilum in separate colors.)

TALL GIANT SNAPDRAGON SUPREME

Supreme Snapdragon is an unbeatable type. The colors are extremely bright, the combination of colors positively unusual. The size of flowers is astonishing, the flowers are perfectly placed on extra strong erect spikes. The plants are remarkably vigorous and healthy. Whether you sell plants to the flower loving public or are interested in cut flowers you want the best and the best there is at present in Tall Snapdragons is Snapdragon Supreme. Height 3 ft.

CRIMSON SUPREME—Very bright deep velvety crimson.

CINNABAR SUPREME—A wonderful color never yet seen in Snapdragons. Most brilliant cinnabar with a bright spot of gold on the underlip.

DELICATE SUPREME—Soft rose-pink. Individual flowers the biggest of all Snapdragons.

ORANGE SUPREME—The upper part of the florets is of brilliant golden color, lower part bright orange, the combination of these two colors producing an immense effect.

PRIMROSE SUPREME—Very rich and very bright primrose.

ROSE SUPREME—Richest and purest rose-pink.

SCARLET SUPREME—Fiery scarlet, throat white.

CORAL SUPREME—Very distinct. Coral pink with amber.

GOLD SUPREME—Color deepest golden yellow.

MIXED—Contains all of the above in proper proportions.

PRICE: Any of the above: T. pkt. 20c; 1/8 oz. 40c; 1/4 oz. 75c.

TALL GIANT SNAPDRAGON MAXIMUM

They represent a marked advance over the older Tall Large Flowered type in size and brilliancy of colors. The spikes are 3 to 4 feet tall with flowers well placed. Excellent for outdoor culture.

CANARY BIRD—Canary yellow, golden yellow center. Massive, well formed spikes.

COPPER KING—Velvety copper scarlet of giant size.

DEFIANCE—Fine, long spikes of fiery red bloom a suffusion of brilliant orange and a glow of rich scarlet. High class either by day or under artificial light.

FASCINATION—A delightful combination of rose pink and yellow blending into a warm, soft rose shade. Very free bloomer.

GIANT ROSE—Goliath type flowers of maximum size, color exceedingly rich, deep, rose pink. Tall.

INDIAN SUMMER—Beautiful and most unusual color, very rich, deep velvety copper. Flowers of the largest size, closely placed on the stem. Highly priced as a cut flower.

ORCHID—Color an exquisite shade of mauve pink. Never fails to attract favorable attention. A wonderful flower.

PINK GLORY—Apple blossom pink, yellow lip. A delicate and pleasing color.

PURPLE KING—Flowers extra large velvety-purple, foliage dark. Extremely heat, drought and rust resistant.

ROSALIE—Rich deep rose toned with amber which gives it a richness of color truly outstanding. It is a self color. Plants base branching with 6-8 long spikes with a beautiful symmetrical arrangement of florets.

RUBY—Velvety ruby red, a color that appeals.

SALMON ROSE—Of a beautiful shade of salmon pink.

SNOWFLAKE—Pure white, yellow tube a profuse bloomer.

CHOICE MIXED—Well balanced mixture. **PRICE:** Any of the above T. pkt. 15c; 1/8 oz. 40c; oz. \$2.80; 1/16 oz. 25c.



AQUILEGIA—COLUMBINE

In bloom from April to July, doing well in partly shaded position as well as in full sunlight. Perfectly hardy. Two year plants carried over in a cold frame over winter and planted out in a cool house late in February will give a crop of splendid spikes three weeks before seen in the outdoor crop. Force same way as Delphinium. Plant a foot apart.

MRS. SCOTT ELLIOTT'S HYBRIDS—Extra large, long spurred flowers, in all imaginable colors. There are shades of pink, red, yellow, blue, purple, light and dark brown, etc., never before seen in columbines. Of vigorous growth. Height 3 ft. T. pkt. 20c; 1/8 oz. 45c; oz. \$2.80; lb. \$35.00

ROCKY MOUNTAIN COLUMBINE—Sepals deep blue, petals white, Height 2 feet. T. pkt. 10c; 1/8 oz. 25c; oz. \$1.40; lb. \$18.00.

ROSE QUEEN—The plants produce on long slender stalks in great profusion flowers of light to dark rose with white center and yellow anthers. Height 2 1/2 ft. 1/8 oz. 35c; T. pkt. 15c; oz. \$2.60; lb. \$32.00.

LONG SPURRED HYBRIDS—Very vigorous growers with luxuriant foliage and frequently over 3 feet in height. The colors of the flowers are most gorgeous; pure white, yellow, deep blue, lavender mauve, chocolate, pale lilac, scarlet, pink, salmon, cerise, etc. T. pkt. 20c; 1/8 oz. 45c; oz. \$2.80; lb. \$35.00.

SILVER QUEEN—Flowers pure white, long spurred. Height 3 feet. T. pkt. 15c.

LEMON QUEEN—Robust growing variety, blooms large, long spurred of pleasing pale yellow. T. pkt. 10c; 1/8 oz. 35c; oz. \$2.00. Height 2 1/2 feet.

CLEMATIFLORA—Spurless Columbine. Flowers large, open, without spurs, clematis-like and very beautiful. Mixed. Height 30 inches. T. pkt. 40c.

DOUBLE LONG SPURRED HYBRIDS—The double long spurred flowers are very beautiful but the seed produces only about 40% of double flowers from seed. The rest are long spurred large flowered singles. MIXED. T. pkt. 20c.

AQUILEGIA CRIMSON STAR Flowers extra large brilliant dark crimson. Height 3 ft. T. pkt. 25c; 1/8 oz. 45c.

AQUILEGIA LONGISSIMA—Admired wherever seen. Spurs often 4 inches long, flowers very large. T. pkt. 40c; 1/8 oz. \$1.00.

AQUILEGIA DOUBLE MIXED—Many colors mixed. Height 2 to 3 feet.

ARABIS ALPINA SUPERBA

Hardy perennial of easy culture withstanding heat and scorching sun even in quite poor soil. Resembles Alyssum in habit and is covered with a sheet of glistening white flowers as soon as the snow disappears. Height 6 inches. T. pkt. 15c; 1/8 oz. 35c.

ARABIS ALPINA ROSEA—Of compact growth, flowers delicate pink from March to June. Height 1 ft. T. pkt. 15c; 1/16 oz. 40c.

ARABIS ALPINA can be forced to produce flowers in February and earlier that will come handy on many occasions. Keep the plants on the dry side, grow COOL and provide perfect drainage.

ARISTOLOCHIA—DUTCHMAN'S PIPE

One of the best perennial hardy climbing plants. Trained against a house or over a trellis it is matchless. Foliage abundant, rich deep green, never bothered by insects. Flowers small, but very pretty, yellow and brown mottled and curiously shaped. Height 30 feet. Space feet apart. 1 oz. \$1.00; T. pkt. 10c.

ARDISIA CRENULATA

A classy decorative plant far from common, bringing high prices at Christmas time. It's main attraction is the berry like coral-red fruit, but the beautifully shaped leaves, the general appearance of the whole plant, the fact that every part of it is fragrant, makes Ardisia an outstanding plant the whole year round. You will make no mistake if you will try Ardisia.

Start the seed in heat in the spring (the seed germinates in 6-8 weeks) then grow cool (45-50 deg.) in rich soil mixed with sharp sand to insure perfect drainage. The following spring your plants will bloom and will be a model of beauty at Christmas time. Half hardy perennial. Height 2-3 ft. Seed in berries.

ARMERIA—SEA PINK

Hardy perennial of robust growth, producing from dense grass-like foliage masses of globe shaped flowers on long stiff stalks from May to August. The flowers are excellent when dried or fresh, retaining their brilliancy for months after cut. First rate cut flower, fine rock plant, easily raised from seed.

ARMERIA CEPHALOTES—Fine large heads of rosy pink on stiff stems two feet long. T. pkt. 10c; oz. \$1.00; lb. \$12.00.

ARMERIA FORMOSA RUBY—This Armeria forms extra large heads of the brightest and lustrous carmine pink from the end of May to October. Fine cut flower, rock plant, bedding plant. Height 18 in. T. pkt. 20c; 1/16 oz. 45c; 1/8 oz. 85c.

ARENARIA MONTANA

A first class hardy perennial rock plant easily raised, doing well in any soil fully exposed to sun. Mat forming covered with silvery white lovely flowers from May to August. Height 4 in.

ARUNDO DONAX

Giant Reed—Absolutely hardy, rapidly growing bamboo-like grass attaining a height from 5 to 15 ft. Succeeds in any soil. Grown for its showy foliage and silky plumes that appear in July and are the finest ornament in dry bouquets, especially when bronzed. T. pkt. 10c; oz. 60c.

ASCLEPIAS TUBEROSA

Butterfly Weed. Hardy plant, 2 to 3 ft. high with very showy flowers of brilliant scarlet, blooming in July and August. T. pkt. 15c; 1/16 oz. 25c; 1/8 oz. 45c.

ASPERULA ODORATA—WALDMEISTER

A hardy perennial, easily raised from seed. Requires a shaded position and moist soil. Height 6 inches; have plants 6 inches apart. The dried leaves retain their fragrance even over a period of years. Blooms in May.

ASTILBE DAVIDII

A very beautiful hardy perennial bearing graceful spikes of rosy violet or mauve flowers in July and August. Fine for cutting. Height 4 ft. Easily raised from seed. T. pkt. 20c; 1/32 oz. 40c.

ASTILBE HYBRIDA—Also called Spirea Japonica. Seed saved from finest varieties such as America, Gladstone, Gloria, Superba, including also the best new tall Arendsi varieties. Hardy perennial. Height 15-30 in. T. pkt. 20c; 1/32 oz. 40c.

ASPARAGUS Both Asparagus Sprengheri and Plumosus will stand quite cool growing temperature but best results are obtained if grown in a night temperature of 50 degrees.

Sow in light sandy soil in well drained shallow flats at any time. December to April is especially good period. You can grow it in solid beds, benches, boxes, bulb pans and even in hanging baskets. Press the seeds firmly into the soil, then cover lightly with sandy soil, keep the sowing in a warm place and do not allow the soil to become dry. This is important. The seed will germinate in 4 to 8 weeks from date of sowing.

PLUMOSUS MARKET KING—Climbing asparagus producing several times the amount of "greens" common Plumosus does. Tender perennial.

SPRENGHERI DEFLEXUS—More ornamental than regular Sprengheri leaves; wider, more substantial, of metallic lustre. Tender perennial.

ASPARAGUS ACUTIFOLIUS—Foliage sharp pointed and very ornamental. Used by the florists in Germany in preference to other green material. Hardy perennial climber. T. pkt. 10c; 100 seeds 30c.

ASPARAGUS SPRENGHERI—100 seeds 20c; 250 seeds 35c; 1,000 for \$1.00; 5,000 for \$4.50.

ASPARAGUS PLUMOSUS NANUS—100 seeds 25c; 250 for 40c; 1,000 for \$1.00; 5,000 for \$4.50, 20 seeds for 10c.

OUR TRADE PACKETS

are double the quantity of retail packets. Our packets are well filled with fresh seed of strong germination, strictly true to name. When it comes to quality our seeds are 100 per cent. You will get no junk from us.

ASTERS

A grand cut flower and a highly paying crop for that purpose. The most popular colors are the soft pink and lavender shades. They are extraordinarily showy when planted in masses. They will stand more cold than cabbage and can be sown or set out quite early. If sown as late as June 1st, will give a good fall bloom even in the North.

Queen of the Market is the earliest aster. ROYAL the best for early market. DAYBREAK are ideal for pots, design work, bedding and borders. All these are extra good and early. GREGO, OSTRICH FEATHER, PEERLESS PINK, HEART OF FRANCE, AUTUMN GLORY, AMERICAN BEAUTY, are all late varieties. Most beautiful of all asters is CALIFORNIA GIANTS variety. The easiest aster to disbud is the AMERICAN BEAUTY.

For a crop of cut flowers sow outside the latter part of April, cover the seed not more than $\frac{1}{8}$ of an inch, transplant into rows 2 feet apart and a foot apart in the row, as soon as the seedlings are large enough to handle. Early transplanting insures vigorous and healthy growth, the plants will be less apt to suffer from disease, especially if planted on clean well drained piece of ground.

In order to get choice extra large blooms you must not allow more than about 10 blooms to each plant. It will pay you to disbud, as choice flowers always sell for a good price.

For early blooming the seed is sown in March in pots, boxes, hot beds or greenhouses, but nothing is gained by sowing earlier. Plants from seed sown in January or February will not bloom a bit earlier than from seeds sown in March.

DO NOT SOW aster seed before March. If you sow in January and February you may find yourself with a lot of plants that are too old—stems hard as wood through which sap cannot pass. Your plants will not be robust and healthy as they would be if sown after March 1st.

In beds space them foot apart each way, cultivate every two weeks until the buds appear, when you must stop all cultivation and keep the patch clean by pulling the weeds by hand. When they start to bloom mulch with tobacco stems to kill the root lice and keep the weeds in check. In blooming time keep a sharp watch for black beetle. Go through the field three times a day. If the beetles do show up, put about a pint of water and halfpint of gasoline in an old can and hold it under the bugs. They drop into it. These pests last only for a few days so the task is not as arduous as one might imagine. Or you can destroy these beetles by dusting with arsenate of lead, washing the open flowers clean before marketing them.

In the South Asters suffer from blight much more than in the North. The florists there grow asters under glass only, use the cleanest dirt they have and water them late enough in the afternoon to prevent burning but in time so that the foliage may get dry before night.

Do not grow asters on ground where the season before you grew tomatoes. If you will your asters will be diseased. Same is true but to a lesser degree of potatoes and carrots which crops seem to take out of the ground an excessive amount of material that asters need but do not get when grown after the above named crops.

ASTER YELLOWS manifests itself on plants by yellow or white color on parts of plants and when the plants are badly affected they are shriveled up and produce no flowers. The disease is caused by a certain leafhopper, a small winged bug and the only protection possible is to grow asters under cloth.

"SURPRISE" ASTER "SALMON GOLD"

New creation in asters, an absolutely new color, never before seen in asters, namely a glowing, salmon-pink with a sheen of gold. Flowers perfectly formed, from 3 to 3½ inches across, very double. Of extraordinary lasting qualities staying fresh, if placed in water, for over two weeks and therefore invaluable for shipping long distances. Stalks wiry and stiff. Very early beginning to bloom in July and lasting till late in fall. Each plant produces from 40 to 50 salable blooms. Height 2 ft.

Wilt Resistant

If your soil is infected try the Wilt Resistant Asters. The seed we offer is first generation stock, grown on highly infested ground in order to insure immunity on sick soils when grown for a crop of flowers. Grown by the famous flower seed specialist, Bodger, and is the best seed money can buy.

WILT RESISTANT ROYAL ASTER

DARK LAVENDER (AZURE BLUE) DEEP ROSE, LAVENDER PINK, (PEACH BLOSSOM) PURPLE, WHITE, MIXED. Any color: T. pkt. 10c; $\frac{1}{8}$ oz. 20c; oz. \$1.40; lb. \$14.00.

HEART OF FRANCE. T. pkt. 10c; $\frac{1}{8}$ oz. 20c; oz. \$1.20.

WILT RESISTANT BALL ASTER

BALL DEEP ROSE—Bright deep rose, blooms in mid-August. Plants branching 3 feet tall. BALL WHITE—Flowers double, crested centers, blooms late August to early September, plants branching 30 in. tall. BALL PURPLE—Deep bright purple, blooms in mid-August. Plants branching, height 30 in. BALL MIXED—Any color: T. pkt. 10c; $\frac{1}{8}$ oz. 25c; oz. \$1.60.

ONCE A YEAR

We issue only one catalog a year. By issuing only one catalog we save money and we pass this saving to our customers. That helps to explain why in many cases our prices seem to be "too low". We receive many letters and in these letters we are informed that the writer is afraid to send us an order for seeds on account of our low prices. Why? Every why has its because. Because our expenses of doing business are less, we sell for less.



EARLY AMERICAN BEAUTY ASTER

In bloom from early July until killed by frost. Flowers almost globular, fully double, never showing any yellow centers, born on extra stout stems 18-24 in. long. Of unsurpassed keeping qualities, excellent for shipping. Height 3 ft.

WILT RESISTANT ROSE PINK. WILT RESISTANT CRIMSON. WILT RESISTANT LIGHT BLUE. WILT RESISTANT CARMINE ROSE. WILT RESISTANT PURPLE. WILT RESISTANT LAVENDER. WILT RESISTANT WHITE. WILT RESISTANT SEPTEMBER PINK, delicate shell-pink. WILT RESISTANT BLACK BLUE. WILT RESISTANT MIXED. Any color: T. pkt. 10c; $\frac{1}{8}$ oz. 20c; oz. \$1.20; lb. \$12.00.

WILT RESISTANT GREGO ASTER

A magnificent American strain, especially adapted to our climatic conditions. The plants form strong, branching bushes about 2 feet high, bearing on long stems, handsome chrysanthemum-like flowers averaging 4 inches or more across. In bloom from 2 to 3 weeks after the average type, thus lengthening the aster season until after frost. Extremely free flowering and a grand cut flower. AZURE BLUE. BLUE FLAME, bright navy blue. CRIMSON. FLESH PINK. LAVENDER. PEACH BLOSSOM, opens white, flushes lavender pink. PURPLE. ROSE PINK. SHELL PINK. WHITE. LAVENDER PINK. LAVENDER ROSE or CATTLEA. DARK VIOLET. MIXED. Any color: T. pkt. 10c; $\frac{1}{8}$ oz. 15c; oz. \$1.00; lb. \$12.00.

QUEEN OF THE MARKET ASTER

An early aster, usually in full bloom, weeks before most other sorts begin to blossom. Plants are about 15 inches high. Of graceful spreading habit; flowers of good size borne on long stems. WILT RESISTANT CRIMSON. WILT RESISTANT ROSE-PINK. WILT RESISTANT FLESH. WILT RESISTANT LIGHT BLUE. WILT RESISTANT WHITE. WILT RESISTANT SCARLET. WILT RESISTANT DARK BLUE. WILT RESISTANT DARK LAVENDER. WILT RESISTANT PURPLE. WILT RESISTANT MIXED. Any color: T. pkt. 10c; oz. 60c; lb. \$8.00.

ASTER HOWARD'S GIANTS

Peony flowered type. Superb for cutting. Flowers of immense size, fully double borne on long stout non lateral stems. Admirably adapted for shipping, the compactly placed petals giving substance and keeping qualities to the flowers. In bloom from July to frost. Height 3 ft. AVIATOR, rich crimson. SILVERY ROSE, rich rose, tipped silver. SWANS-DOWN, pure white. MAIDEN'S BLUSH, delicate flesh pink. PEACH BLOSSOM, lavender pink. AZURE FAIRY, clear sky blue of even tone. PURPLE ROSE, purple blue. ROSE BUD, deep rose. MIXED. Any color: T. pkt. 15c; $\frac{1}{8}$ oz. 30c; oz. \$2.00; lb. \$18.00.



Aster Giant Ostrich Feather

GIANT OSTRICH FEATHER ASTER

The plants are strong growers, attain a height of about 30 inches and bloom in August. The flowers are borne on long stems.

WHITE, ROSE, CRIMSON, DARK BLUE, VIOLET BLUE, LIGHT BLUE, LAVENDER, MIXED. Any of the above: $\frac{1}{8}$ oz. 15c; oz. \$1.00; lb. \$11.00; T. pkt. 10c.

ASTER AMERICAN BRANCHING

Of vigorous growth, producing a heavy crop of flowers from midsummer to frost. The flowers are perfectly double, long petaled with well filled out centers and from $3\frac{1}{2}$ to 4 inches across, borne on stout stems often 2 feet long. Plants branching $2\frac{1}{2}$ to 3 feet high. The seed we offer is of the choicest quality. Wilt resistant.

DARK LAVENDER (AZURE BLUE), DEEP CRIMSON, SALMON ROSE, DEEP ROSE, DEEP PURPLE, PALE LAVENDER, SHELL PINK, WHITE, MIXED. Any color: T. pkt. 10c; $\frac{1}{8}$ oz. 15c; oz. \$1.00; lb. \$12.00.

ASTER GIANT CALIFORNIA SUNSHINE

A greatly improved strain producing giant flowers on long stems. Broad petaled star-like with a cushion center of exquisite beauty, high class for cutting. Plants branching. The seed we offer comes 80-90% true, blooming in mid-September. Height 2 ft. MIXED. T. pkt. 30c; $\frac{1}{8}$ oz. 45c; oz. \$3.00.

ASTER IMBRICATED POMPON

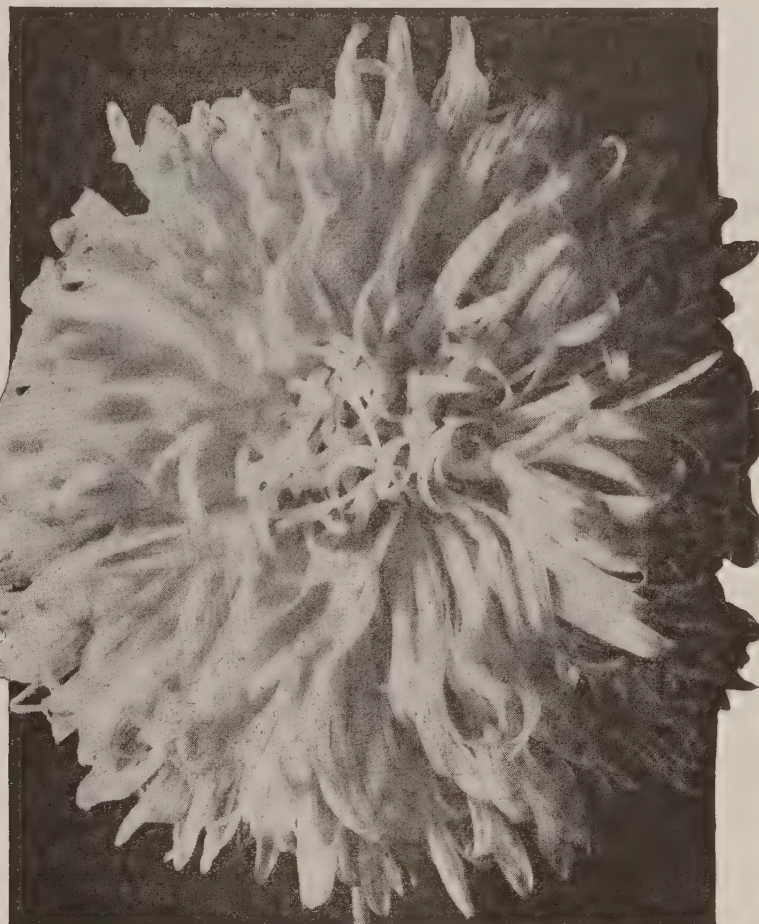
A charming type, flowers extra double completely filled out with short imbricated petals borne on stout stems. Plants of upright growth producing large amount of bloom from very early in the spring till fall. Height 18 in. Many colors. MIXED. T. pkt. 15c; $\frac{1}{8}$ oz. 25c; oz. \$1.60.

ASTER DWARF BOQUET

An extra early flowering class of dwarf upright, compact growth, bearing double flowers about $1\frac{1}{2}$ in. across. An ideal plant for spring sales especially when potted. Height 10 in. Many colors. MIXED. T. pkt. 10c; $\frac{1}{8}$ oz. 20c; oz. \$1.40.

CONSULT the front pages of this catalog. You will find many important novelties listed on those pages.

VERY FINE seed such as begonia, etc., is easily germinated if the seed is placed on an earthen pan, the pan placed on a brick, the brick placed in a pan of water, the brick about half submerged in water and the whole thing placed under a bench. Cover the pan with a pane of glass and keep shaded. The brick acts as a wick carrying the water up to the earthenware pan, no overhead watering and no chance to lose the seed by washing out.



ASTER LOS ANGELES

CALIFORNIA GIANTS ASTERS

Very beautiful vying in size of flower and length of stem with well grown chrysanthemums. The flowers measure 6 inches across and are filled with broad, long, incurved petals resembling in formation the well known Crego type of asters. Born on 2 feet long, stiff and strong non-lateral branching stems, requiring no disbudding. Unexcelled for cutting and whether assembled in a bouquet or as a single bloom fully as impressive as chrysanthemums or double peonies.

WHITE, PEACH BLOSSOM, LIGHT BLUE, DEEP ROSE, CRIMSON, DARK PURPLE, CARMINE ROSE, MIXED. Any of the above: T. pkt. 15c; $\frac{1}{8}$ oz. 25c; oz. \$1.60, lb. \$18.00.

SUPER GIANT ASTER

At present the largest and most fully double Aster class. The flowers are from 6 to 8 inches across, the petals unusually curled and interlaced. Plants 30 inches tall with 6 to 8 long, non-lateral stems per plant. Very early. The best aster for cutting.

SUPER GIANT CRIMSON, (El Monte). SUPER GIANT SHELL PINK. (Los Angeles). SUPER GIANT WHITE. (Queen of Provence). SUPER GIANT MIXED. Any color: T. pkt. 20c; $\frac{1}{8}$ oz. 30c; oz. \$2.00; lb. \$20.00.

PEERLESS YELLOW ASTER

Flowers extra large, perfectly double, ball shaped like a chrysanthemum, long petaled of a most attractive soft and beautiful yellow. A color that harmonizes in any color scheme. Finds ready sale on any flower market. Branching type, medium early in season, plants of vigorous growth often yielding 15 flowers on perfect long stems, per plant. You will grow this aster in quantity if you will once try it. Height 3 ft. T. pkt. 10c; $\frac{1}{8}$ oz. 25c; oz. \$1.80.

ASTER SPECIAL MIXTURE

Composed of the finest large flowered tall growing varieties, covering the widest range of colors. Every care is taken, not the slightest detail overlooked to make this mixture the most valuable and besides varieties listed in this catalogue, it contains new creations in asters especially purchased for this mixture. Lb. \$12.00; oz. \$1.00; T. pkt. 10c.

CONSULT the front pages of this catalog. You will find many important novelties listed on those pages.



Aster Heart of France

HEART OF FRANCE Branching type. Flower stems long, blooms medium large, fully double to the center, of deep ruby red color. Height 2 ft. T. pkt. 10c; $\frac{1}{8}$ oz. 20c; oz. \$1.20; lb. \$15.00.

ASTER EARLY GIANT

The finest large flowered, heavy stemmed wilt resistant Aster yet developed. Flowers are of the large Giants of California type, while the plants are less tall, about 2 ft. in height, with strong heavy stems. Early blooming, coming into flower early in August, fully four weeks earlier than the Giants of California.

LIGHT BLUE—Clear rich light blue, a shade which blends beautifully with either deeper or lighter tones.

PEACH BLOSSOM—Opens almost white and flushes light pink then lavender pink as the flower fully matures.

ROSE MARIE—Lively rich rose.

MIXED. Any color: T. pkt. 20c; $\frac{1}{8}$ oz. 60c; oz. \$4.00.

Hardy Asters

For sheer beauty there is nothing that can compare with a large bed of hardy asters in bloom. Every plant a hill of color, the whole bed a sea of bloom. They thrive without care in any soil in full sun.

ASTER ALPINUM GOLIATH

Absolutely hardy, easily raised from seed, flowers large, daisy-like, deep lavender in color, with a small yellow disc on stout stalks 10 in. long. In bloom from May to July, fine for cutting and rock work. Height 1 ft. T. pkt. 10c; $\frac{1}{16}$ oz. 30c.

ASTER FLORISTS DELIGHT

Hardy Aster, flowers light blue, single, four inches across during May and June, born on long wiry stalks, fine for cutting. Height 2 feet. T. pkt. 25c. Same as Wartburg Star.

ASTER BABY'S BREATH

Produces flowers in sheets from August to November resembling and having the same usefulness as Gypsophyla. Flowers single, large white in loose clusters. Plants neat, compact, 20 in. tall. Hardy. A highly paying flower to florists no matter where located. T. pkt. 20c; $\frac{1}{16}$ oz. 30c.

HARDY ASTER AMELLUS—These hybrids are of neat growth never over 30 in. high, the flowers of perfect form, some small, others as much as $2\frac{1}{2}$ inches across in light and dark blue, violet, dark and light pink and bright red. They bloom from August to almost frost. Very floriferous, high class for cutting. T. pkt. 20c; $\frac{1}{16}$ oz. 30c.

HARDY ASTERS MIXED—Our mixture contains best varieties early and late as well as dwarf and tall. T. pkt. 10c; $\frac{1}{8}$ oz. 30c; oz. \$2.00.



Peony Type of Aster

SINGLE ASTER—The blooms of these are very graceful, the petals long with but very small yellow centers. Our mixture contains every color. Height $2\frac{1}{2}$ feet. T. pkt. 10c; $\frac{1}{8}$ oz. 15c; oz. \$1.00; lb. \$10.00.

AUBRIETIA EYRII

Rock Cress. A dainty and very beautiful, dwarf, creeping plant, forming brilliant sheets of dark blue from April to July. A gem for planting in crevices of rocks or walls, forming a cataract of color. Of all Aubrietias Eyrii is the best because a strong grower and most hardy. Start the seed in flats then place in pots. Aubretia having single slender root does not transplant easily. Potting up the plants is therefore recommended. Height 6 in. T. pkt. 15c; $\frac{1}{16}$ oz. 35c; $\frac{1}{8}$ oz. 60c.

DOUBLE BALSAMS—LADY SLIPPER

To grow fine specimens they should not be closer than 18 inches apart. Tender annual. Height 18 to 20 inches.

GARDENIA FLOWERED—Bush Balsam. New. Plants compact, bushy, 20 in. high, flowers double, large gardenia-like in clusters at the top of the stems, not hidden in the foliage, throughout the season. High class for bedding. The colors are hermosa-rose, vermilion red, rosy-white and pure white.

MIXED: T. pkt. 15c; $\frac{1}{8}$ oz. 30c; oz. \$2.00.

CAMELLIA FLOWERED MIXED—Large and double. T. pkt. 10c; oz. 40c; lb. \$4.80.

BAPTISIA AUSTRALIS—FALSE INDIGO

Produces during May and June, fine spikes of sky-blue, lupin-like flowers, good for bouquets. Foliage neat, dark green, an ornament in itself. Height 3 feet. The seed germinates 2 to 4 weeks after sowing. Hardy perennial. T. pkt. 10c; $\frac{1}{8}$ oz. 15c; oz. 80c; lb. \$6.00.

BROWALLIA—AMETHYST

SPECIOSA MAJOR—This can be grown in the poorest soil and makes a grand bedding plant, blooming profusely all through our hot dry summers, until frost. The flowers are of the most brilliant ultramarine color. Fine for baskets or vases but especially valuable as a pot plant for winter, and early spring flowering. Should be sown early in the spring and set out about the middle of May. If sown in August or September will make a fine pot plant, in bloom in the spring. Tender annual. Height 12 inches. T. pkt. 10c.

BROWALLIA SAPPHIRE—High class pot plant bearing hundreds of beautiful violet blue flowers from May to fall. Of compact bushy growth. Tender perennial. Height 10 in. T. pkt. 20c; $\frac{1}{64}$ oz. 40c.

CONSULT the front pages of this catalog. You will find many important novelties listed on those pages.

**WE FILL SEED ORDERS THE SAME DAY
AS RECEIVED**



Column Daisy

Bellis-English Daisy

Lovely edging perennials with cheerful button-shaped flowers in early spring. They thrive in moist and somewhat shady situations. They must be transplanted every year and in our climate protected over winter with a layer of about 4 inches of straw. They grow readily from seed and should be sown indoors in February or March or in August in a cold frame and protected over winter. Treated thus they will bloom abundantly early in the spring. Plant 4 inches apart. Height 6 in.

SNOWBALL—Large, double white flowers.

LONGFELLOW—Pink.

FINE DOUBLE MIXED—

MONTSTROSA—Of robust growth, extra large, double flowers on long stout stems. **WHITE, PINK, RED, ETNA, dark red, MIXED.** Any color.

BELLIS AMERICAN BEAUTY—New. Flowers extra double on long stout stems 4 inches across. Color lustrous crimson—rose a new color in Bellis. Fine for bedding and cutting.

COLUMN DAISY—Grows upright. Is very compact, flowers large and double, snow white, and ideal as a pot plant as well as for bedding. A splendid new flower.

BEGONIA ROSE BOIS DE VAUX

New. An improvement on the old favorite Chateleine. Of compact pyramidal growth, foliage metallic green bordered with red, covered with a mass of vivid soft rose bloom. Excellent novelty. Height 8 inches. T. pkt. 50c.

BEGONIA RED PEARL—Flowers extra large, over 2 inches across, of bright salmon scarlet, foliage glossy green, plants of compact ball shape 8-9 inches tall.

BEGONIA PINK PEARL (Rosa Perle)—Identical in growth and size of bloom with Red Pearl. Color brilliant rose-pink self with no suggestion of deeper shading. T. pkt. 50c.

BEGONIA WHITE PEARL—Same as Red Pearl in growth and height of plant, flowers over two inches across, snow white.

The Pearl type of Begonias belongs to the Gracilis section of fibrous rooted Begonias. Excellent either for pot culture or for bedding. Withstands a good deal more of unfavorable weather than other varieties of Begonias.

ERFORDIA—Begonia Pink Profusion is an improved Erfordia.

FLORISTS—Sow some Pumilum Snapdragon in February. By the middle of May they will develop into heavy 4-inch pot plants with 6 or more flower spikes, if you will grow them in 50 deg. house and shift and pinch a few times. The plants will sell themselves and they can be produced practically without cost.

PLATYCODON is a flower that every florist and grower of flowering plants should know. Try Platycodon.

Begonia

Sow indoors in January and February in shallow boxes, using leaf mold and some coarse sand in the soil. Smooth the surface of the soil, sprinkle the seed thinly on top and press the seed in with a piece of smooth board. Never cover the seed with soil. Cover the box with a piece of glass raised a bit so the air can enter; keep the soil moist by spraying in a fine mist. Transplant when the plants are large enough to handle.

For winter blooming or early spring blooming sow from August to September. Begonias are tender perennials and must never be planted outside until the weather is thoroughly settled. They require a shady, moist situation and lots of water during the growing period. Never water while the sun is shining as this causes the leaves to rust. All Begonias are slow growers and for the first two months they seem to make no progress whatever, but they are coming just the same, and if the seed is sown in January you will have bushy plants in 4's by the middle of May. The seed germinates best in a temperature of 75 degrees.

Our **BEGONIA** seed is raised for us by a German specialist. Positively none better. Same is true when it comes to Primulas, Cinerarias, etc. We believe in quality, having over forty years of business experience, we know where and how to secure the best there is in seeds.

BEGONIA RADIO RED—An outstanding new begonia for bedding and pots. Flowers very large bright dark red, foliage very dark green. In great demand. Height 1 ft. T. pkt. 25c; 1/64 oz. 65c; 1/32 oz. \$1.20.

BEGONIA TAUSENDSCHOEN—Of close compact growth not over 6 inches tall, covered with flowers and buds of lustrous rich pink. In Germany where this begonia originated it is considered at present the finest, rich pink begonia for bedding and winter forcing. T. pkt. 60c.

BEGONIA INDIAN MAID—In great favor with growers. Plants about 10 inches tall, foliage of blackish-brown metallic lustre, flowers brilliant scarlet. The two contrasting colors make the plant very conspicuous. Comes true from seed and is easy to grow. T. pkt. 40c.

KAETHE TEICHER—Flowers rich carmine-pink, foliage shiny, dark green. Height 10 in. T. pkt. 30c.

BEGONIA ROMANCE—Can be brought into full bloom at Christmas time from seed sown in July. From then on, it will bloom uninterruptedly for months. Flowers bright carmine-red, foliage light green. Height 8 inches. Sown in January will make a high class blooming pot plant for Mother's Day. Quick growing, a heavy bloom producer and disease resistant.

BEGONIA CHRISTMAS CHEER—Everblooming. Of broad, compact, globular growth, completely covered with fiery, cherry-red flowers two inches across. Foliage is dark, shiny green. Height 6 in. T. pkt. 40c.

BEGONIA DRESDEN Was chosen by the committee of the Dresden Floral Exhibition as the most outstanding begonia for bedding. Heavy bloom producer, flowers of medium size of striking brilliant carmine-scarlet. Plants of even growth 9 inches tall.

BEGONIA LUMINOSA COMPACTA

No other Begonia will produce as much bloom as this one. Unexcelled for bedding as a pot plant and high class as a winter bloomer. Color bright scarlet. Height 5 inches. T. pkt. 40c; 1/64 oz. \$2.00.

BEGONIA PINK PROFUSION

(Begonia Gracilis Heterosis Pink Profusion.) Of very compact growth, flowers pure La France rose with rosy purple buds. Very floriferous. Height 10 inches. Originator's seed.

GRACILIS LUMINOSA—Vigorous grower. Brightest scarlet flowers, blooms in winter also. Foliage reddish brown. Height 10 in. T. pkt. 25c; 1/64 oz. 65c; 1/32 oz. \$1.20.

GLORY OF ERFURT—Flowers three inches in length and inch and a half across, intense glowing crimson. Profuse bloomer. Height 12 in. T. pkt. 40c; 1/64 oz. \$1.75.

GUSTAV KNAAKE—Resembles Lorraine, very free flowering flowers 2 inches across, fiery crimson. Height 10 in. T. pkt. 25c; 1/64 oz. 65c; 1/32 oz. \$2.20.

PRIMA DONNA—Limpid rose shading to carmine, most beautiful also for winter blooming. Height 10 in. T. pkt. 40c; 1/64 oz. \$2.00; 1/32 oz. \$3.00.

SEMPERFLORENS ALBA—Vigorous, constant bloomer, flowers white in drooping panicles. Height 14 in. T. pkt. 15c; 1/32 oz. 25c 1/2 oz. 50c; oz. \$3.00.

BEGONIA SPECIAL MIXTURE—Contains Semperflorens and Gracilis varieties in equal proportions. T. pkt. 15c; 1/64 oz. 40c.

TUBEROUS ROOTED HYBRIDS—Flowers of gigantic size often 6 inches across, from white and vivid scarlet through shades of bright bronze yellow, light and dark crimson, orange, ruby-red, rose and pink. Our seed has been saved from selected flowers, is carefully hybridized and will produce tubers in six months. Single mixed. Height 14 in. T. pkt. 25c; 1/64 oz. \$1.25; 1/32 oz. \$2.25.

TUBEROUS ROOTED BEGONIA DOUBLE—Seed from a collection of perfect specimens, saved for us by an eminent specialist, producing about 80% of doubles. **MIXED.** T. pkt. (about 500 seeds) 40c; 1/64 oz. \$4.00.

BEGONIA DROOPING GEM

Of drooping habit, fine for boxes, hanging baskets, etc. The overhanging branches of the plant are crowded with small, shiny leaves from which hang double pendulous flowers in many colors. Something new and good. Popular and much employed in Europe. A tuberous rooted variety.

BIRD OF PARADISE FLOWER

POINCIANA GILLIESI—Easily raised. The flowers resemble a gaudy colored humming bird and appear in May and June. Fine house plant. Not hardy north of St. Louis. See also *Strelitzia*. T. pkt. 15c; oz. \$1.40.

BRACHYCOME—SWAN RIVER DAISY

A profuse flowering annual with blue flowers an inch across, resembling those of cineraria, suitable for pot culture, edgings and small beds. In bloom from June to October. Height 12 inches.

Sow the seed from February to May or in the Fall under glass to get bloom in April and May. Heat and drought resisting plant, doing well in even very poor soil. Annual. **MIXED**. T. pkt. 10c; 1/8 oz. 30c.

BRIZA MAXIMA—QUACKING GRASS

An annual grass, valuable for bouquets, either fresh or dried. The heart shaped seeds are constantly in motion. Of the same value as *Gypsophyla*. Blooms in June to September. Height 15 inches. T. pkt. 10c; oz. 40c.

BOCCONIA CORDATA—PLUME POPPY

Very showy and quite unlike the regular poppy in that the flowers are small, creamy white and are borne on long stems quite above the massive foliage, from May to July. Height 8 feet. The seed germinates slowly. Oz. 70c; 1/8 oz. 15c; T. pkt. 10c.

**Cactus**

CEPHALOCEREUS SENILIS—Old man cactus. Globe shaped, covered with long gray hair-like spines.

ECHINOCACTUS M. POTOSINA—Bishop's Cap cactus.

CEREUS MARGINATUS—Pillar-like, ribbed, thick set with spikes that resemble pearls.

ECHINOCACTUS SAGLIONI—A variety much in demand. Dark green body, spines red.

MAMILLARIA BOCASANA—Very odd, easily raised, very popular. 50 seeds 20c; 100 seeds 35c; 1,000 seeds \$2.25.

MAMILLARIA E. STELLA-AURATA—Gold Star cactus, a popular variety. 50 seeds 20c; 100 seeds 35c; 1,000 seeds \$2.75.

TIGER CACTUS—ALOE VARIEGATA—Fan-like growth, wide fleshy leaves, striped like a zebra. A self selling plant. Immensely popular in Europe as a house plant. Plants of good size can be raised in nine months from seed.

CACTUS CHOICEST MIXED—The choicest of *Cereus* including night blooming *Cereus*, *Echinocactus* and *Mammillaria* cactuses in many forms. No *Opuntias* or other common sorts. Our seed will produce plants of shapely growth and moderate size, something that is readily saleable. The three groups of cactus have seed that germinates readily in from 2 to 3 weeks from date of sowing. The seedlings must be transplanted as soon as large enough to handle. Cactus is raised from seed about the same as directed for begonia only during winter cactus must be watered very sparingly, must be in containers provided with PERFECT drainage and the soil for cactus must be half sharp clean sand and half whatever good soil is handy. 50 seeds 20c; 100 seeds 35c; 1,000 seeds \$3.00.

For more succulents see *Euphorbia* and *Mesembryanthemum*.

BORONIA MEGASTIGMA

Highly valuable pot plant easily and inexpensively raised producing attractive flowers, maroon-purple outside, yellow within. Foliage resembles that of *Asparagus Sprengeri* and this foliage is so fragrant that one plant will perfume a whole room. At present little known on this side but highly popular in Europe. Requires sandy soil, carnation temperature and should be pinched back in order to produce nice bushy plants. Water sparingly during winter. Blooms all winter. Tender perennial. Height 2-3 ft.

CALLIOPSIS Free flowering half hardy annuals of the easiest culture, doing well in sunny position, excellent for cutting and massing. Sow where they are to stand, thin out to nine inches apart. By keeping the old flowers cut off the plants will bloom until frost.

CALLIOPSIS DWARF MIXED—Height 12 in.

CALLIOPSIS TALL MIXED—Height 3 ft.

ANY OF THE ABOVE—T. pkt. 5c; oz. 15c; lb. \$2.00.



CALLIOPSIS DAZZLER—Extra large, maroon-red, single flowers with a golden yellow border produced in greatest profusion from April till frost. Plants bushy and compact. Annual. Height 10 in. T. pkt. 10c; 1/8 oz. 20c.

CALLIOPSIS THE GARNET—Compact growing plants covered with large deep, bright scarlet single flowers from April to frost. Height 10 in. Annual. T. pkt. 10c; 1/8 oz. 20c.

CALLIOPSIS—Garnet and Dazzler are an entirely new race, different from the old type of *Calliopsis*. Flowers twice as large, plants compact and very dwarf, covered with bloom of such beauty and brilliance that no flower lover will leave your place without buying if he will see the plants in bloom.

CALLIOPSIS GOLD CREST

In a test planting of New York Florists Club of 267 new flowers *Gold Crest* received the highest mark, namely excellent. Flowers of mammoth size, semi-double, golden yellow with a reddish brown zone. Height 20 inches. Annual. T. pkt. 10c; oz. 60c.

ANTIRRHINUM ST. GEORGE and **ROYAL ROSE** are very outstanding. If you grow plants for spring sales, include these two Snapdragons in the line of plants you are now growing. Immensely popular on account of color. One a brilliant rose, the other a most unusual bronze shade.

BECAUSE OF THE WAR

It is impossible to secure choice stocks of some flower seeds that must be raised by experts to be of the required quality. These choice stocks we used to get mainly from Germany. The war cut us off from this source of supply. We have left the description of such items in the catalog but where we do not quote the price it means that at present we do not have seed on hand and may not have for the duration of the war.

WE FILL ALL SEED ORDERS THE SAME DAY AS RECEIVED



BLUE LACE FLOWER—DIDISCUS

Fine bedding plant and excellent for cutting. Flowers lace-like, lavender blue $2\frac{1}{2}$ in. across borne on long stems all summer from seed sown in April. Sown in September produces bloom in March sown in January begins to bloom in May. For greenhouse culture start in flats later pot up as needed allow to bloom in 3 inch pots placed on the shelf in mid-winter. Water carefully, apply weak manure water once a week. Night temperature 50 deg. Outdoors for best results sow where the plants are to stand, do not transplant allow 6-8 inches of space between the plants. Annual. Height 2 ft. T. pkt. 10c; $\frac{1}{8}$ oz. 15c; oz. 80c.

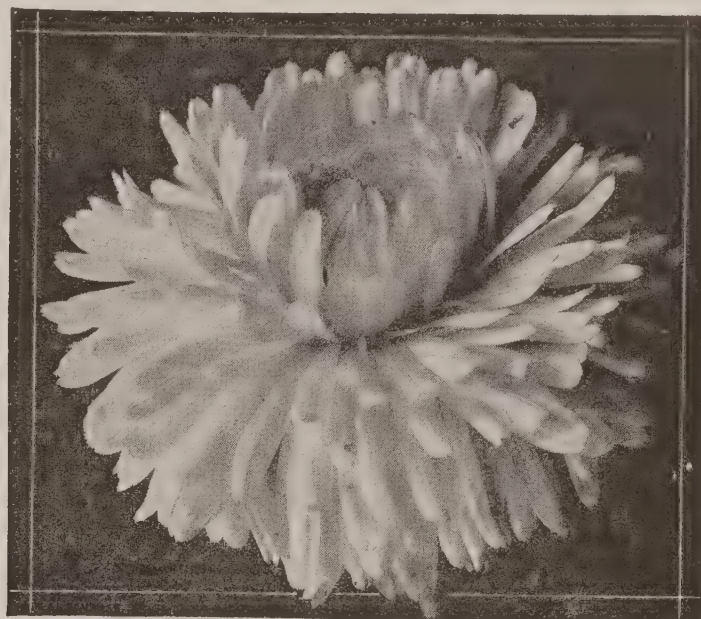
Calendula

An annual, 2-3 feet tall, producing very large, double, brilliantly colored flowers on long, stiff stems if grown in moist and COOL atmosphere with plenty of room to develop. The first blooms are apt to be short-stemmed and must be pinched out to insure long-stemmed blooms to come. Grow in a night temperature of 45 to 60 degrees, plant a foot apart each way or pot the plants and place them a foot apart on the benches. To get bloom for Thanksgiving, sow early in August, sow in September to succeed chrysanthemums and towards the end of February to get bloom in May. Calendula is a cool weather plant, during summer when it is hot and dry, even the best strains produce undersized and mostly single flowers.

Requires very rich soil. One-half rotted manure, the other half rotted sod and 3 lbs. of bone meal to every large wheelbarrow of soil. Acid phosphate applied once in two weeks improves the bloom wonderfully. Best grown in solid beds, if on benches have at least 6 in. of soil. Will stand no shade, the soil must never be allowed to become too wet or too dry. To get well formed large double flowers disbud once a week. One ounce of seed produces 1,200 to 1,600 plants.

ON THE PACIFIC COAST, in the Mountain states and in the far North calendula if sown in succession will produce a heavy crop of flowers of the finest quality from June to frost.

Calendula, Improved Bismarck Stocks and Freesias never fail to make money for the growers. The best prices are obtained during December, January and February. Calendulas have one drawback, namely, they wilt quickly if placed in a shallow dish or bowl, but will last five days or longer if kept with fully one-half of their stems in water. Call attention of your customers to this fact to avoid disappointment. Calendulas are always in demand and are easily handled, can be produced in a 50 deg. house or less and they can be grown for less than the price demanded by the wholesale growers and be of better quality. What are the returns? That is the most important question. Fritz Bahr says: Out of a bench 5x100 feet, occupied by 400 plants, seed sown July 25th and the plants benched Aug. 27th, these were the returns: Started cutting Oct. 11th up to Jan. 12th, the bench yielded 312 dozens and these sold partly retail and partly wholesale, brought in money \$331.25. After Calendulas stocks went into that bench, that were started from seed Oct. 15th and later placed in $2\frac{1}{2}$'s. These stocks (Imp. Bismarck) should flower around the end of March and be out of the way by April 15th. The bench put in condition, can then be planted with Gladiolus, the bulbs of which were started in 3's about March 15th.



Calendula Chrysantha Sunshine

GREENHOUSE CALENDULAS

MASTERPIECE—Flowers large, very double on long stems, clear rich orange with a brown center. Height 24 in.

SENSATION or CAMPFIRE—Improved Florist strain. Blooms completely double, four inches across or over, flat across the top of deep orange with a scarlet sheen produced in quantity on long, heavy cutting stems. Ideal for florist use. Height 20 in.

ORANGE GIANT—Extra large double brilliant deep orange. Extra choice. Height 20 in.

ORANGE KING SELECT—Flowers extra large bright deep orange. Height 20 in.

LEMON KING SELECT—Same as Lemon Queen. Flowers extremely double clear lemon yellow with darker center. Height 20 in.

BALL ORANGE—(Long Orange). Deep orange, extra long stems. Height 20 in.

BALL APRICOT—Soft apricot, dark eye, large double flowers.

BALL ORANGE IMPROVED—Glowing orange, petals slightly notched, light center. Plants of compact growth. Height 20 in.

GREENHOUSE MIXED—Contains all the above, orange shades predominating.

PRICE—Any of the above: T. pkt. 20c; $\frac{1}{8}$ oz. 25c; oz. \$1.40.

BEDDING CALENDULAS

CHRYSANTHA SUNSHINE—Clear bright yellow, petals incurved. Height 24 in.

ORANGE SUNSHINE—Golden orange. Sunshine type of Calendulas will produce first class cut-flowers during summer in spite of hot weather.

RADIO—Deep orange, petals quilled. Height 20 in.

LEMON KING—Light yellow, light center. Height 20 in.

ORANGE KING—Double flowers of brilliant orange. Height 20 in.

FINEST BEDDING MIXED—Contains all calendulas of distinction.

PRICE—Any of the above: T. pkt. 10c; oz. 45c; lb. \$5.00.

CALCEOLARIA GARNET

If you are looking for something extraordinarily classy in the line of pot plants, a plant that will sell fast and for a good price, you will try Calceolaria Garnet. The flowers are produced in large heads in a cloud-like formation and are of velvety crimson-scarlet, an unusual shade, stunningly effective. The foliage is neat compact cushion like, the whole plant extraordinarily neat. In European markets produced a near sensation. It is of the Multiflora Nana class, easy to produce from seed and still more easy to sell. Individual flowers $1\frac{1}{2}$ inches across. Height 10 in.

CALCEOLARIA MULTIFLORA NANA—Easily raised and easily handled. Flowers not quite as large as of the Grandiflora, in many self colors as well as combination of colors produced in abundance never before seen and as many as 500 individual flowers are crowded on one plant, producing very striking effect. Height 1 ft. MIXED. T. pkt. 40c.

Calceolaria

The best time to sow is late in July or in August. Sow in pans or in shallow pots, using rich soil mixed with plenty of sharp sand. Place the pans in shade. In about two weeks the young plants appear and the pans must be moved to light and given plenty of air. When the plants are large enough to handle transplant into flats, spacing them 2x2 inches. Later place in small pots and shift as needed. The final transplanting into large pots is done in March or April. Use very rich soil with leaf mold. Calceolaria requires perfect drainage, plenty of air must never suffer from lack of water, will stand lot of cold but no frost. The seed is exceedingly fine but germinates readily.



CALCEOLARIA HYBRIDA ALBERT KENT

Originated from the Albert Kent variety. Strikingly beautiful, unusual, new, never before seen a plant that will show a good profit to the florist. We offer the seed of these new hybrids in mixture containing 10 to 12 different colors. T. pkt. 50c.

CALCEOLARIA TIGRINA

DWARF TIGERED AND SELF COLORED MIXED—Plants dwarf and compact only 9 in. high, flowers of maximum size, the finest strain in existence, none better. T. pkt. 25c; 1/64 oz. \$2.00.

Campanula

Of easiest culture, growing in either sunny or partly shaded positions.

By sowing the seed early under glass and transplanting as soon as the weather becomes settled, they will bloom the first year. Sown outdoors in April or May, transplanted to rich soil in August or September, will bloom the following year.

CAMPANULA CARPATICA

Hardy perennial of vigorous growth producing quantities of elegant cup shaped flowers an inch across on long stems from June to September. Fine for bouquets, rockeries, beds and edgings. Loves sun but will endure partial shade and an immense amount of drought. Never bothered by insects or disease. Height 1 ft. Blue-White-Mixed. T. pkt. 15c; 1/8 oz. 20c; 1/2 oz. \$1.40.

CAMPANULA AMABILIS—Hardy perennial of vigorous growth in bloom during June and July. Flowers bell shaped lavender blue. Height 30 in. T. pkt. 15c; 1/8 oz. 25c.

C. GARGANICA—Extremely beautiful, unexcelled as a house plant or in a greenhouse. Tender perennial requiring perfect drainage. Plants spreading covered with star shaped clear blue flowers in June. Height 5 in. T. pkt. 20c.

CAMPANULA GRANDIS—Hardy perennial, flowers bell shaped, wide open, three inches across in June and July. Height 3 ft. WHITE BLUE MIXED. Any color: T. pkt. 20c; 1/8 oz. 40c.

CAMPANULA GLOMERATA SUPERBA—Easily raised hardy perennial of robust growth and great beauty. Flowers at the end of a stout stalk assembled in an immense crown-like formation of intense deep blue in June and July. High class for cutting. Heat and drought resisting. Height 2 ft. T. pkt. 20c; 1/8 oz. 30c; 1/4 oz. 50c.

"BASKET" CAMPANULA

Unexcelled for hanging baskets and pots, producing in greatest abundance, large, open light blue, bell-shaped flowers, on long overhanging branches. Of all plants belonging to this class we do not know of any nearly as beautiful and full of grace as this Basket Campanula. Will thrive even under gross neglect. Height 8 in. T. pkt. 50c.

CAMPANULA ROTUNDIFOLIA SUPERBA

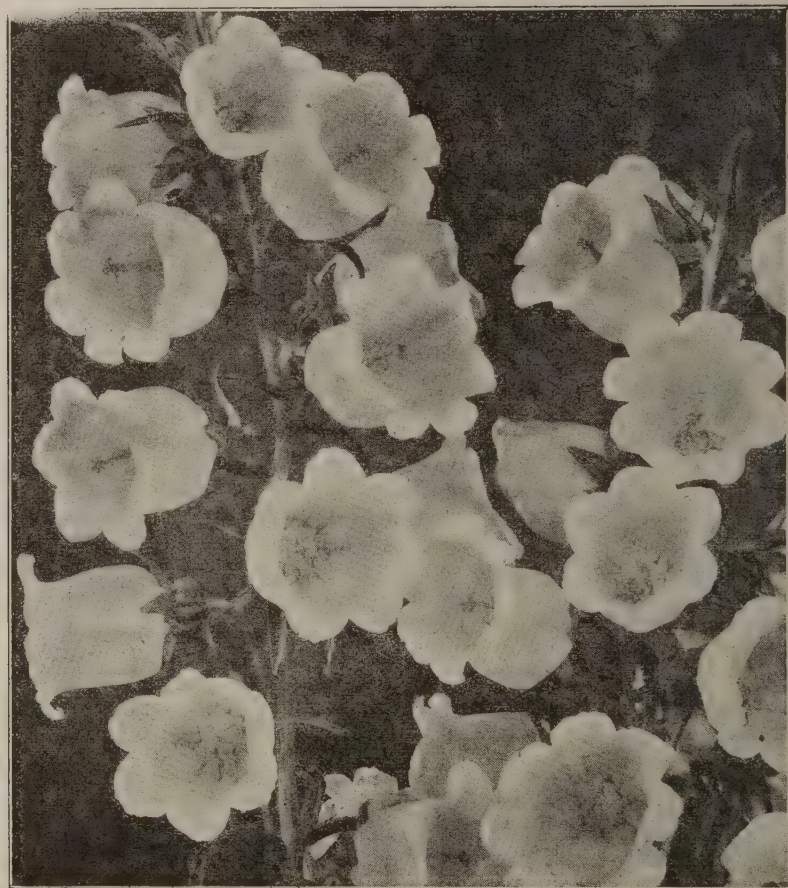
Blue Bells of Scotland. Improved strain of robust growth producing a wealth of bloom from May to September. Height 1 ft. T. pkt. 30c; 1/16 oz. 65c.

CAMPANULA TELHAM BEAUTY—Hardy perennial, flowers extra large, bell shaped, soft lavender-blue from May to July. Height 30 in. T. pkt. 40c.

CAMPANULA PYRAMIDALIS—(Chimney Bell Flower). Hardy perennial. The flower spikes are crowded from May to September with numerous large blue salver-shaped flowers forming a perfect pyramid 4 to 6 feet high. Very conspicuous and beautiful. T. pkt. 15c; 1/8 oz. 25c; oz. \$1.60.

CAMPANULA MOERHEMII—Snow-white semi double flowers 2-3 inches across, grand for cutting, border decoration as pot plants and first rate for exhibition. Easily raised. Hardy. Height 30 in.

CAMPANULA RAINERI—First rate perennial hardy rock plant spreading, flowers erect, lavender blue, late in June and during the entire month of July. Drought and heat resisting, extra choice and rare. Height 5 in.



Campanula Medium—Canterbury Bells

CAMPANULA MEDIUM—Large showy bells from June to August. Height 3 ft. Blue, Mixed. Any color: T. pkt. 5c; oz. 40c; lb. \$4.00. Valuable for forcing. Cut the flowers when they are half open.

CAMPANULA MEDIUM ANNUAL—Blooms six months after sowing. The flowers are inferior in size and not quite as attractive as the biennial sort. Mixed. T. pkt. 10c.

CUP AND SAUCER CAMPANULA

C. MEDIUM CALYCANTHEMA—An excellent cut-flower in bloom from June to August. Flowers resemble cup and saucer, extremely showy. Height 3 ft. Blue, Pink, White, Mixed. Any color: T. pkt. 10c; 1/8 oz. 25c; oz. \$1.60.

CAMPANULA SPECIAL MIXTURE—This contains all of the best perennial varieties as listed with a good proportion of new and rare sorts. T. pkt. 15c; 1/8 oz. 25c; oz. \$1.60.

C. RAPUNCULOIDES—Strong growing perennial campanula, producing quantities of spires of deep violet blue flowers. Height 3 feet. T. pkt. 10c; 1/8 oz. 20c; oz. \$1.40.



Candytuft

Fine for bouquets for ribboning or dwarf beds. Sow in August and September and give the plants slight protection over winter. Fall sown plants will bloom from May to July and bear flowers of extra fine quality. Sown early in spring will bloom from July to September. For Mothers' and Memorial Days sow in the latter part of December and grow up in two in pots. Or you can sow in an exhausted lettuce or chrysanthemum bed, space the plants 8 inches apart and you will get an enormous amount of high class bloom, even without pinching in a house with carnation temperature.

To increase the size of flowers for cut flowers some of the branches should be removed. For continuous blooming sow every two weeks. They are easily forced into bloom during winter. Of the perennial varieties Gibraltarica is the finest, blooming from March to June, but never attains more than 2 feet in height. If left undisturbed will form fine bush with dense foliage.

ANNUAL CANDYTUFT

EMPRESS IMPROVED—This is the finest of all the white varieties, producing spikes 6 inches long and 3 inches across. Unsurpassed for outdoor bedding and extensively used for forcing. Height 15 in. T. pkt. 10c; 1 oz. 50c; 1 lb. \$5.20.

GIANT HYACINTH FLOWERED—Pure white, reselected florist's strain, extra. Height 15 in. Blooms in May and June. T. pkt. 10c; oz. 50c; lb. \$5.20.

CANDYTUFT UMBELLATA

Very floriferous, furnishing almost unbelievable quantities of bloom. Fine for cutting, bedding and as a pot plant. Height 12 in. **DEEP PURPLE, CRIMSON, WHITE, SOFT PINK, LAVENDER, ROSE-CARMINE, MIXED.** Any of the above: T. pkt. 10c; oz. 35c; lb. \$3.20.

ROSE CARDINAL SELECT—Richer and deeper pink than common stock. Our seed comes 99% true and is no mixture of colors. Pkt. 10c; oz. 60c; lb. \$6.00.

PERENNIAL CANDYTUFT

CANDYTUFT SEMPERVIRENS SNOWFLAKE—Flowers exceptionally large pure white, in great masses in May and June. Height 1 ft. T. pkt. 25c.

SEMPERVIRENS—Completely covered with heads of pure white flowers in April and May. Height 1 ft. Much used for cemeteries, rockeries, etc. Hardy perennial. T. pkt. 15c; ½ oz. 40c; ¼ oz. 25c; oz. \$2.80.

CANDYTUFT GIBALTARICA HYBRIDA—Large white flowers shading to lilac, in profusion during May and June. Height 1 ft. Of all perennial Candytufts Gibraltarica is the most striking and showy. Not hardy north of St. Louis. Winter the plants in a cold frame. They are worth the trouble. T. pkt. 10c; oz. 80c.



Carnation

CARNATION GRENADIN—Plants of neat compact growth, flowers double, fragrant, produced on long wiry stems from May to August. First class for cutting, pots and borders. Height 20 in.

CARNATION GRENADIN RED—Bright scarlet red, early blooming. **WHITE**—Beautiful variety for cutting. **WHITE**

GOLD—Beautiful soft yellow, excellent for cutting. **DARK**

RED—Deepest red, very fine. **PINK**—Bright rose-pink.

CARNATION GRENADIN MIXED—T. pkt. 20c. Cannot supply Grenadin in separate colors.

SPECIAL CARNATION MIXTURE—This mixture includes Giant Margareth, Chabauds, Giant Fancy, Malmaison, Giant of Nice, Riviera Market, Dwarf Vienna, etc. Out of these seeds anyone can raise flowers as large as the best florist's Carnation. T. pkt. 15c; 1/16 oz. 35c; ½ oz. 55c; oz. \$4.00.

MARGARETH—No matter at what time of the year the seed is sown this carnation comes into bloom in five months and it can be had in bloom at any time of the year early in the spring, in the winter, etc. The flowers are from 2 to 3 inches in diameter. Height 16-20 inches. **MIXED:** T. pkt. 10c; ½ oz. 20c; oz. \$1.20.

CARNATION DWARF VIENNA—Perfectly hardy, plants of neat compact growth, flowers very double strongly fragrant on good stems 10 in. high, from June to late fall, in red, brick red, pink, violet and white. **MIXED:**

CARNATION TAUSENDSCHOEN

New. Hardy perennial carnation of the Dwarf Vienna type, flowers large and double, color an enchanting shade of light salmon pink. Originated in Germany where it is highly prized owing to its long stiff stem and charming color that goes well in any flower arrangement.

CARNATION GIANT CHABAUD

Flowers fully double and of giant size almost as large as the best greenhouse carnations on extra strong and wiry stems 16 to 20 inches long from May to frost from seed sown in January. They come true from seed.

JEANNE DIONIS, pure white—**RUBIS**, ruby red—**MARIE CHABAUD**, pure yellow—**LEGION OF HONOR**, brick-red—**QUEEN OF ROSES**, rich pink—**L'ETINCELANT**, fiery scarlet—**PEARL**, blush pink—**MIXED.** Any color: T. pkt. 15c; 1/16 oz. 30c; ½ oz. 50c; oz. \$3.20.

CASSIA MARYLANDICA

Hardy perennial producing a wealth of showy yellow flowers in panicles two feet long from June to September. Sow the seed where the plants are to stand. Height 5-6 feet. T. pkt. 10c; oz. 60c; lb. \$6.00.

CANARY BIRD VINE

A beautiful rapid annual climber, a variety of nasturtium with clean, handsome foliage and charming little canary-colored blossoms bearing a fancied resemblance to a bird with its wings half expanded. Culture the same as for nasturtium. T. pkt. 5c; oz. 40c; lb. \$3.00.

CANNA—INDIAN SHOT

Soak the seeds in warm water until they show signs of swelling, then sow in sandy loam and keep in warm place; when up to the second leaf, set out. The seedlings bloom the first summer. Seed saved by ourselves from the finest large flowered varieties. T. pkt. 10c; oz. 50c; lb. \$4.00.

CARDINAL CLIMBER

Leaves finely cut like those of Japanese Maples, flowers brilliant scarlet. Hardy annual. Height 20 ft. Soak seed in warm water before sowing. T. pkt. 10c; oz. 80c.

CHRISTMAS ROSE

Hardy perennial, blooming outdoors from December to April, planted in a shady spot, sheltered from the north.

Seed germinates slowly. Height 15 in.

CATANANCHE MIXED

A splendid hardy perennial strawflower, excellent for cutting, bearing on the long slender stems, flowering heads two inches across, with wide, flat-toothed, blue or blue and white rays of elegant appearance. Blooms in June, July and August, and grows 2 feet tall. Our mixture contains the *coerula* and *coerula alba* varieties, one blue, the other blue and white. T. pkt. 10c; ½ oz. 20c; oz. \$1.00.

CERASTIUM TOMENTOSUM

SNOW IN SUMMER—Hardy perennial of dwarf, compact growth, with wooly white leaves, bearing great numbers of white flowers in May and June, much used for edging and as a rock plant. Height 6 in. T. pkt. 10c; 1/16 oz. 20c; ½ oz. 30c; oz. \$1.60.

Celosia—Cockscomb

Sow in April indoors or in May outdoors. Plant in rich ground spacing the crested varieties 8 inches apart, the feathery varieties 2 feet apart. Water freely. Tender annuals.

CELOSIA FEATHERED VARIETIES

CELOSIA—CHILDSII—Same as Chinese Woolflower. Mixed. Height 30 in. T. pkt. 10c; oz. \$1.00.

PLUMOSA MAGNIFICA—Feathered Cockscomb. Inexpensive bedding plants and cut flowers either fresh or dried. Of pyramidal growth colors clear, of metallic lustre. Attractive dark mahogany—red foliage. There are very few flowering plants that will make as impressive and truly magnificent display as *C. Plumosa Magnifica*. On rich ground the plants attain a height of 5-6 feet; on moderately rich ground the height is 3-4 feet. **CRIMSON, YELLOW, SCARLET, ROSE, MIXED.** Either color: T. pkt. 10c; oz. 80c; lb. \$8.00.



DWARF FEATHERED CELOSIA

Plants of compact pyramidal growth, foot high producing 15-20 branches tipped with silky plumes that sparkle and scintillate even under artificial light. A very valuable plant that can be used for every purpose a flower can serve. As a pot plant, for bedding as a cut flower, etc., etc.

FIRE FEATHER—Brilliant crimson. **GOLDEN FEATHER**—Deep yellow. **MIXED.** T. pkt. 15c; ¼ oz. 25c; ½ oz. 40c; oz. \$3.00. Height 10 in.

CELOSIA COCKSCOMB VARIETIES

CELOSIA PRES THIERS—Combs large velvety, crimson. T. pkt. 15c; oz. \$2.00. Height, 12 in.

CRESTED COCKSCOMB TALL MIXED—T. pkt. 10c; oz. 60c.

GLASGOW PRIZE—Very fine dwarf form with deep velvety crimson combs. T. pkt. 15c; oz. \$2.00. Height, 12 in.

CRESTED COCKSCOMB DWARF MIXED—Improved dwarf growing varieties in red, pink, yellow, white, violet, etc. T. pkt. 15c; oz. \$2.00. Height, 12 in.

CARYOPTERIS MASTACANTHUS

Free flowering hardy perennial of high value for cutting. Blooms in great profusion from early in September till frost. Verbena-like flowers in blue, white and pink. Loves sandy soil. Will bloom till midwinter under glass. Easily raised from seed. In the North dies down in winter but new shoots spring up freely in the spring and produce a crop of bloom the same season. Height 3 ft. T. pkt. 15c; oz. \$1.00.

CEPHALARIA ALPINA

Robust growing, hardy perennial, about 5 feet in height, suitable for rear of borders when bold effects are desired and fine for cutting. The flowers are like scabiosa in shape, the color of green gold, very double, almost three inches across. Of elegant form, borne on long, stout stalks in June and July. T. pkt. 10c; 1 oz. 60c.

CHERRY NEW PATTERSON

Plants of very compact growth, 10 inches high with a spread of 15 inches, loaded with perfectly round, bright scarlet cherries that stay on the plants for months after fully developed. A very superior "Cherry." Sow the seed from January to April, transplant in flats then pot up and shift as needed. In pots use rich soil mixed with sand and some bone meal. T. pkt. 20c; 1/16 oz. 35c.

CHEIRATHUS ALLIONI

Hardy Siberian Wallflower, Gorgeous bright yellow flowers from early till frost if the seed pods are removed. Height 1 ft. Perennial. Not dependably hardy in Iowa. T. pkt. 10c; oz. 60c.

Centaurea America

For real beauty and extreme grace, has few rivals. The flowers are double from 4 to 6 in. across, borne on long stout stems, invaluable for cutting. Cut when partly open. Stays fresh for a long time in or out of water. In bloom from July to frost. Annual. Height 3 ft.

CENTAUREA AMERICANA is high class when dried. Hang the bud just before it opens upside down till dry.

LILAC—WHITE—MIXED—Any color. T. pkt. 10c; oz. 60c.

CENTAUREA MONTANA—Hardy perennial growing 2 feet high with large feathery flowers from June to August.

BLUE—MIXED. Any color: T. pkt. 10c; oz. 60c; lb. \$6.00.

CENTAUREA MACROCEPHALA—Hardy perennial, flowers glistening golden yellow in globular heads of enormous size, extremely showy. In bloom from June to August. Height 3-4 ft. T. pkt. 10c; oz. \$1.20.

CENTAUREA PULCHERRIMA

Also called *Aetheopappus*. A truly splendid flower, that you will sell fast, when in bloom, which is in May and June. Its corn-flower like flowers are 1½ inches across, vivid rose-pink with a well defined pure white center, very double, very beautiful. Fine bedding and rock plant and first rate cut flower. Hardy perennial. Height 16 in.

CHELONE BARBATA PRAECOX

Hardy perennial producing elegant spikes of elongated trumpet shaped flowers in many rich colors from May to September. Of striking beauty. Will do well in almost any kind of soil but for good success the plants must be mulched with straw or strawy manure in a layer of 4-5 inches. High class for cutting. Height 4 ft. T. pkt. 10c; oz. 80c.

LINARIA FAIRY BOQUET is one of the loveliest of flowers. Plants compact, neat, elegant, flowers miniature snapdragon-like, absolutely charming. Fine for marketing in flats or potted.

*Centaurea Imperialis* Bridegroom

Centaurea

Sow outdoors after danger from frost, cover the seed $\frac{1}{4}$ inch deep. Transplant to stand foot apart. To get flowering plants in May sow under glass in January. Transplant when the seedlings have developed 2 to 3 true leaves and plant in the open when danger of frost is past. Candidissima should be sown as soon as possible after January 1st, and Gymnocarpa soon after February 1st, to get fair sized plants for spring use.

Centaurea Imperialis—Giant Sweet Sultan

Produces from June to September long stemmed blossoms 3 to 4 inches across of graceful airy effect, and most deliciously fragrant. If cut scarcely opened they will last for 10 days in water. Height 2 to 3 feet. Annual.

WHITE, LILAC, CRIMSON, SUAVEOLENS—Yellow.

FAVORITE—Brilliant rose. **SPLENDENS**—Purple.

BRIDEGROOM—Heliotrope, extra large. **MIXED**.

Any of the above: T. pkt. 10c; oz. 60c.

DOUBLE CORNFLOWER (*Centaurea Cyanus*.)

Sown in August will give an early winter crop in a cool greenhouse. Started in January produces flowers in April. Grow your plants first in two inch pots, transfer to solid beds late in February. Provide supports, watch for aphids, space 12x15 in. You can use the flowers of white Centaurea when wired 3 together in place of white carnations and your Centaurea will come handy at any time. It is one of the daintiest cut flowers. Temperature 50 degrees or less. Annual. Height 2 ft. Select Florist strain, very double and true to color. **PINK** (Pinkie), **WHITE** (Snowman), **BLUE** (Blue Boy), **MIXED**. Price, any color: T. pkt. 10c; oz. 60c; lb. \$6.00.

JUBILEE GEM—Extra large and extra double clear bright blue flowers, plants of compact growth only, 15 in. tall. T. pkt. 10c; $\frac{1}{8}$ oz. 15c; oz. \$1.00.

CENTAUREA GYMNOCARPA (Dusty Miller). An ornamental leaved plant, forming a round bush of silvery fern-like leaves. Fine for bedding, vases, hanging baskets and pots, and particularly effective as an edging to a bed of dark leaved cannas. Height 20 inches. T. pkt. 10c; 1 oz. 60c.

CENTAUREA CANDIDISSIMA COMPACTA—Fine plant for borders and ornamental gardening growing 15 inches high. Its leaves are thick and velvety and of silvery gray color. T. pkt. 10c; $\frac{1}{8}$ oz. 30c; $\frac{1}{2}$ oz. 50c; 1 oz. \$3.80.

CENTAUREA RUTHENICA

Flowers canary-yellow two inches across, double, borne on long stems during July and August. An excellent cut flower easily raised, thriving in almost any soil in full sun. Hardy perennial, height 4 ft. T. pkt. 15c.

Chrysanthemum

WHITE STAR—Flowers single, $3\frac{1}{2}$ in. across, pure white with an almost invisible pale lemon center, July to October. Annual. T. pkt. 10c; oz. 45c.

YELLOWSTONE—Flowers double of good size and elegant form. Color the most appealing bright lemon-yellow. Highly valuable as a cut flower. Annual. Height 2 ft. T. pkt. 15c; $\frac{1}{8}$ oz. 20c; oz. \$1.20.

SPECIAL MIXTURE—A mixture of choice single and double flowering annual varieties. Flowers 3 inches across on long stiff stems from June to November. Excellent for cutting. Height 2-4 ft. T. pkt. 10c; oz. 25c; lb. \$3.00.

DOUBLE SHASTA DAISY—Flowers five inches across, resembling an aster, almost double, borne on long stiff stems for almost three months, and pure white in color. Hardy perennial. In our trials it proved perfectly hardy and produced a good crop of high class double flowers in spite of excessively hot and dry weather. Height 3 ft. T. pkt. 20c; $\frac{1}{8}$ oz. 60c; $\frac{1}{8}$ oz. \$1.00; oz. \$7.00.

CHRYSANTHEMUM MAY QUEEN—Hardy perennial in bloom from April to August, flowers snow-white, 4 in. across. Height 30 in. T. pkt. 15c; $\frac{1}{8}$ oz. 30c; oz. \$2.00.

HARDY EARLY FLOWERING DOUBLE in choicest mixture. This strain produces from seed sown in February under glass, about 80 per cent flowers of the pompon as well as Japanese type, and will bloom earlier than the so-called hardy Chrysanthemums. You will save the work of wintering the plants. Height $2\frac{1}{2}$ feet. T. pkt. 15c; $\frac{1}{8}$ oz. 60c; $\frac{1}{8}$ oz. \$1.10; oz. \$5.00.

*Chrysanthemum* Mrs. C. L. Bell

MRS. C. L. BELL—New. Hardy vigorously growing variety with flowers 6 inches across of purest white, with broad petals of much substance, bearing great numbers of flowers on long stems in June and July.

Heat and drought resistant. A splendid cut-flower. Height 36 in. Pkt. 15c; $\frac{1}{8}$ oz. 20c; oz. \$1.40.

MAYFIELD GIANT—Perfectly hardy even in Iowa. Flowers extremely large, snow white, borne on long stout stems. Plants of vigorous growth. Divide and reset every fall for best results. Height 3 feet. T. pkt. 20c; $\frac{1}{8}$ oz. 30c; oz. \$2.00.

CASCADE CHRYSANTHEMUM

Half hardy perennial blooming 6 months from date of sowing. Flowers single, semi double and some almost double, resembling in form the flowers of gerbera. Colors bronze, crimson, white, orange, etc. Fine for cutting and a very showy pot and basket plant. Drooping habit, spikes 12-15 inches long. **MIXED COLORS**: T. pkt. 25c; $\frac{1}{8}$ oz. 50c.

CHRYSANTHEMUM SUCCESSION MIXTURE—This mixture contains the best, longest lived and hardest of hardy chrysanthemum varieties. The plants raised out of this seed will furnish you bloom from early in May till late in summer. T. pkt. 15c; $\frac{1}{8}$ oz. 25c.



CINERARIA

Sow the seed from June to August in pans, using half leaf mould and half sand. When the plants have two well formed leaves and two more just coming on, place them in small pots. When ready to repot use again leaf mould, mixing it this time with one-eighth part of coarse bone meal. When the plants are ready for large pots, use half leaf mould and half compost. Keep the plants as near the glass as possible except when they are ready to bloom, when they should be kept at a greater distance from the glass. Give plenty of air and always watch for aphids. Keep the plants cool, 40 at night and 60 degrees during the day is right. June sown seed produces bloom for Christmas.

HALF DWARF MIXED—Choicest large flowered, prize varieties, raised by a European specialist, and represents the cream of the largest collection of specimens in Europe. Height 12 in. T. pkt. 25c; 1/64 oz. \$1.00; 1/32 oz. \$1.95; 1/8 oz. \$7.50.

CINERARIA GIGANTHEA—Blue with white ring.

Our trade packets of Cineraria contains 160 to 180 seeds and the seed is the VERY best there is.

CINERARIA CALIFORNIA SUPER GIANTS—This Cineraria has flowers 4-6 inches across. The stems all come from the base of the plant bearing flowers in flat topped trusses. Many colors. Height 18 in. Superb Mixture. T. pkt. 35c; 1/64 oz. \$1.20; 1/32 oz. \$2.20.

CINERARIA OLYMPIC GIANTS—Individual flowers of a size never before seen in Cineraria, namely 5-6 in. across. Wide range of colors both self and ringed. Plant compact. 18 in. tall. T. pkt. 30c; 1/64 oz. \$1.20; 1/32 oz. \$2.20.

CINERARIA CREMER'S—Cremer's Prize strain of Cineraria has individual flowers of medium size borne in immense trusses close above the foliage. Due to small and though foliage does not require the space to finish that other strains require. Practically wiltproof. T. pkt. 30c; 1/64 oz. \$1.20; 1/32 oz. \$2.20.

CINERARIA MULTIFLORA GRFL MAXIMA

Improved Berlin Market Strain. A strain remarkable for vigor, richness and wide range of colors. Plants compact, 12-15 in. tall, foliage neater than is the rule in Cinerarias. The bloom is a neat, semi-globular bouquet containing from 80 to 100 individual flowers, well above the foliage. Originator's seed. T. pkt. 40c; 1/64 oz. 80c.

CINERARIA CRIMSON KING

(Cineraria Multiflora Nana Praecox.) Flowers shining dark crimson, single, of medium size in immense symmetrical heads resembling a huge bouquet. Foliage small very dark green, forming neat compact cushions. Blooms two weeks ahead of other Cineraria. Very strong grower. Height 10 in.

CINNAMON VINE Bulblets planted in the spring produce tubers 5 to 9 inches long by fall. Plant 3 inches apart, cover 1 inch deep. 50 bulblets 20c; 100 for 35c; 1000 for \$2.00, postpaid.

CINERARIA MULTIFLORA POTSDAM

Hard to beat by anything in the line of pot plants. Individual flowers only about one-third the usual size, yet the flower-heads are of the same dimensions as seen in the choicest of large flowered strains, namely 12 to 15 inches across. The effect is wonderful. You see nothing but flowers that touch and crowd one another, the great number of individual blooms bring out the beauty of the plant so strikingly that flower lovers actually are "grabbing" the plants at sight. The colors are many, clear and decided. Height 10 in. T. pkt. 30c; 1/64 oz. 65c.

Dusty Miller Cineraria

CINERARIA MARITIMA DIAMOND—The foliage is snow white, finely laciniated and broad. Nothing finer for bedding. Height 15 in. T. pkt. 10c; oz. 45c; lb. \$4.50.

See also *Centaurea Gymnocarpa*, another "Dusty Miller."

Clarkia

Hardy annual effective either in beds or as a pot plant and a first rate cut flower. Does well in sun or shade, requires POOR soil, soil mixed with sand or sifted ashes. Very beautiful when well grown. Where the soil is rocky or sandy and in cloudy climates Clarkias develop to perfection, there is no flower that will make a finer display in beds large or small. Blooms from July to September. Started in August and up to January blooms from February to May. Night temperature 45 degrees. Height 12 in. Cut Clarkia when partly open.

We offer the choicest double flowering varieties that produce a striking effect and are easy to sell. Height 20 in.

CLARKIA ILLUMINATION

Flowers large double, freely produced on symmetrical compact plants two feet tall. Of an enchanting color, namely orange mingled with rose pink.

ENCHANTRESS—Beautiful shade of salmon-pink.

BRILLIANT—Brightest carmine. **ORANGE KING**—Bright orange scarlet. **SALMON QUEEN**—Soft shade of pink. **VESUVIUS**—Orange scarlet, shaded salmon, the brightest color in Clarkias. **MIXED**. Any color: T. pkt. 15c; oz. \$1.00; lb. \$12.00.

Clematis Recta

Invaluable for cutting as it produces immense quantities of highly attractive, creamy-white, fragrant bloom in May and June and fills the bill to perfection as material for mixed bouquets that sell so well on Memorial Day. Plants of vigorous upright growth needing no support, doing well in any soil. Hardy perennial. Height 4 ft. T. pkt. 10c; 1/8 oz. 25c; oz. \$1.60.

CLEMATIS PANICULATA

One of the best of all hardy climbers, disease free, fast growing, forming dense sheets of white fragrant bloom lasting for several weeks. T. pkt. 10c; oz. 50c; lb. \$6.00.

CLEMATIS DAVIDIANA—Upright growing, non-climbing variety with large, bright green foliage and tubular bell-shaped flowers of deep lavender-blue, during August and September. Perfectly hardy, deliciously fragrant. Height 3 ft. Excellent for shady places. Pkt. 10c; 1/8 oz. 25c; oz. \$1.60.

The seed of Clematis Davidiana and Clematis Recta germinates easily in from 15-20 days from date of sowing when sown either in the spring or fall. The seed of Clematis Paniculata unless sown as soon as the seed is ripe, which is late in September, lays long before it germinates. We supply fresh seed from our own growing.

CHRISTMAS PEPPER

Sow under glass early in the spring, set out when danger of frost is over, 15 inches apart each way. Before frost and not until the plants are full of berries, lift the plants and put in 4 inch pots and grow them on. Or start the seed in April, place in 2 1/2's and in May in 5's. Place the pots in a frame, pack solid around, keep the soil wet but the soil in pots rather dry. To make a better looking plant pinch out the end shoots bearing no fruit. Christmas pepper as well as Cleveland Cherries sell well from November up to New Year.

PRINCE OF WALES—The finest of all ornamental peppers. Plants of neat compact bushy and uniform growth, loaded with round, bright orange fruits. T. pkt. 20c; oz. \$1.00.

CHERRY RED—Popular variety of Christmas Pepper of vigorous upright growth loaded with small round deep scarlet peppers. T. pkt. 15c; oz. 60c.



Cyclamen—Best German

CULTURE—Sow in flat filled with sifted leaf mould and enough coarse sand to insure good drainage and cover about $\frac{1}{4}$ in. Seed germinates irregularly and germinates best in a dark place with moist and rather close atmosphere in a temperature of from 40 to 45 degrees. As the plants show up, transplant carefully into other flats, spacing them an inch apart. When plants are ready, transplant them from one flat to another, for about six months after that place them in $2\frac{1}{2}$ in. pots. In flats plant shallow, the bulbs barely covered with soil, in pots keep bulbs covered to a depth of about an inch, except when in blooming size pots when the bulbs should be placed half way above the soil. Transplant from pot to pot whenever the plants show healthy root growth around the inside of the pots. Soil for pots must be rich, mixed with well decayed cattle manure. Keep plants shaded and give them plenty of air at all times. Never allow the plants to bloom in smaller pots than 4 inches. Over summer, place in frames filled with sand, bury the pots half way into the sand, allow at least an inch of space between them, keep the hot sun out by whitewashing the glass and the plants cool by ventilating and frequent spraying. Or keep them in a frame house with dirt walks and keep the soil under the benches always moist but not soaking wet. When the plants are in blooming size pots, transfer them into large and airy house. Cyclamen does not like heat; to keep plants cool, ventilate, spray with water; keep shaded to avoid leaves from wilting and to avoid disease spray once a week with nicotine, and if disease appears, spray with nicotine twice a week and place powdered charcoal around the plants on top of the soil. Water carefully. The highest prices are paid for Cyclamen in December. It takes 16 to 18 months to raise a perfect plant from seed—sow accordingly.

The seed we offer is raised for us by one of Germany's best growers and is the best money can buy.

PEARL OF ZEHLENDORF—Dark salmon pink. **ROSE OF ZEHLENDORF**—Light salmon pink. **GLORY OF WANDS-BECK**—Dark clear salmon. **SUNRAY**—Pure pink, blood-red eye. **BONFIRE**—Brilliant ruby-salmon.

VULCAN—Glowing dark red. **BRIGHT ROSE**—Deep pink. **ROSE OF MARIENTHAL**—Lavender pink with red eye. **PURE WHITE**—PURE WHITE WITH RED EYE—**LILAC BLUE**.

CYCLAMEN SPECIAL MIXTURE

Includes every variety listed as well as new varieties all of Giant Flowering class. 10 seeds 25c; 50 seeds \$1.10.

CYCLAMEN FINE MIXED—This mixture includes all colors, the seed is fresh and although low in price its quality is very close to the very best. 10 seeds 20c; 50 seeds 95c.

HARDY CHRYSANTHEMUM

IN A SPECIAL MIXTURE (SUCCESSION MIXTURE). This mixture contains the best, longest lived and hardiest of hardy chrysanthemum varieties. The plants raised out of this seed will furnish you bloom from early in May till late in summer. T. pkt. 15c; $\frac{1}{2}$ oz. 25c.

IN EVERY CASE when price is not quoted for any item in this catalog it means that we are unable to supply that seed at the present, owing to war conditions.



Coleus For spring sales sow late in January or early in February, press the seed into the dirt and cover lightly with dirt when the seeds are beginning to sprout. When the plants are large enough to handle, pot off singly, shift as needed. Use rich and porous soil.

COLEUS METEOR Leaves of enormous size in shades of copper red with a metallic lustre.

COLEUS SUNRISE—Miniature form of Coleus, plants only 10 inches tall. The leaves are small but very thick set on the stalks. Colors almost without an end, many plants having leaves bordered and marked in a remarkable fashion. Unexcelled for fancy beddings and for pots.

FINEST MIXED—This contains the finest varieties of coleus with leaves which often measure 10 inches in length and 8 inches in width, heart shaped and handsomely crimped, toothed and frilled, their color combinations are remarkably rich, comprising all the reds, metallic green and yellows in shades in the most delicate to nearly black. T. pkt. 25c.

Flowers for Bouquets

Achillea, Aconitum, Acroclinium, Ageratum, Ammobium, Anemone, Anthemis, Anthirrhinum, Aquilegia, Arctotis, Armeria, Asperula, Aster, Astilbe, Bellis, Brachycome, Browallia, Calendula, Calliopsis, Campanula, Carnation, Cantanache, Celosia, Centaurea, Cheiranthus, Chrysanthemum, Clarkia, Coreopsis, Cosmos, Dahlias, Delphinium, Dianthus, Digitalis, Dimorphotoca, Doronicum, Eryngium, Eupatorium, Gaillardia, Gillia, Geum Gerbera, Godetia, Gomphrena, Gypsophyla, Helianthus, Helichrysum, Hesperis, Heuchera, Hugelia, Hunnemanlia, Iris, Larkspur, Lavatera, Lathyrus, Lavender, Leptosyne, Linaria, Lunaria, Lupinus, Linum, Lychnis, Marigold, Mignonette, Myosotis, Nasturtium, Nemesia, Nierembergia, Nigella, Pansy, Pardonanthus, Pentstemon, Phlox, Physalis, Physostegia, Platycodon, Poppy, Primulas, Pyrethrum, Rhodante, Rudbeckie, Salpiglosis, Salvia, Saponaria, Schizanthus, Scabiosa, Senecio, Silene, Statice, Stevia, Stocks, Stokesia, Sunflower, Sweet William, Sweet Pea, Valeriana, Verbena, Viscaria, Thalictrum, Trachelium, Tritoma, Xeranthemum, Wallflowers, Zinnia. See also Ornamental Grasses. Most of them are useful for bouquets.

A shorter list including only the more important bouquet flowers: **Acroclinium, Antirrhinum, Arctotis, Asters, Calliopsis, Carnation, Centaurea, Coreopsis, Cosmos, Delphinium, Gaillardia, Gypsophyla, Helichrysum, Larkspur, Marigold, Phlox, Salpiglosis, Saponaria, Scabiosa, Statice, Sweet Pea and Zinnia.** With Iris, Peonies and hardy ferns the above will produce during the summer till frost an uninterrupted supply.

A PEARL

among flowers is salpiglosis. Without an equal in richness of coloring, one of the choicest, very finest, very select, yet almost unknown. Start a bed of salpiglosis so that visitors and passersby could see, stop, look, admire and inquire as well as to start them talking, mentioning your place of business as the place where they have seen the flower of fabulous beauty.

CLEOME PINK QUEEN

This hardy easily grown annual is recommended as a first rate cut flower owing to its pleasing bright salmon-pink color. In bloom from mid-summer to fall. Plants of compact growth. Height 4 ft. T. pkt. 10c; oz. \$1.00.

PUNGENS—A very easily raised, coarse plant of strong scent. Thrives in any soil from the richest to the poorest. Should be spaced a foot part. Height 2½ feet. Annual. Oz. 25c; lb. \$2.40; T. pkt. 5c.

GOLDEN CLEOME—Color golden orange. In bloom from July to November. Hardy annual. Height 6 ft. T. pkt. 15c.

COIX LACHRYMAE—JOB'S TEARS

(Job's Tears). An annual grass producing shiny round seeds of grayish color which are used as an ornament. Plant a foot apart. Hardy annual. Height 30 in. T. pkt. 10c; oz. 20c; lb. \$1.20 prepaid.

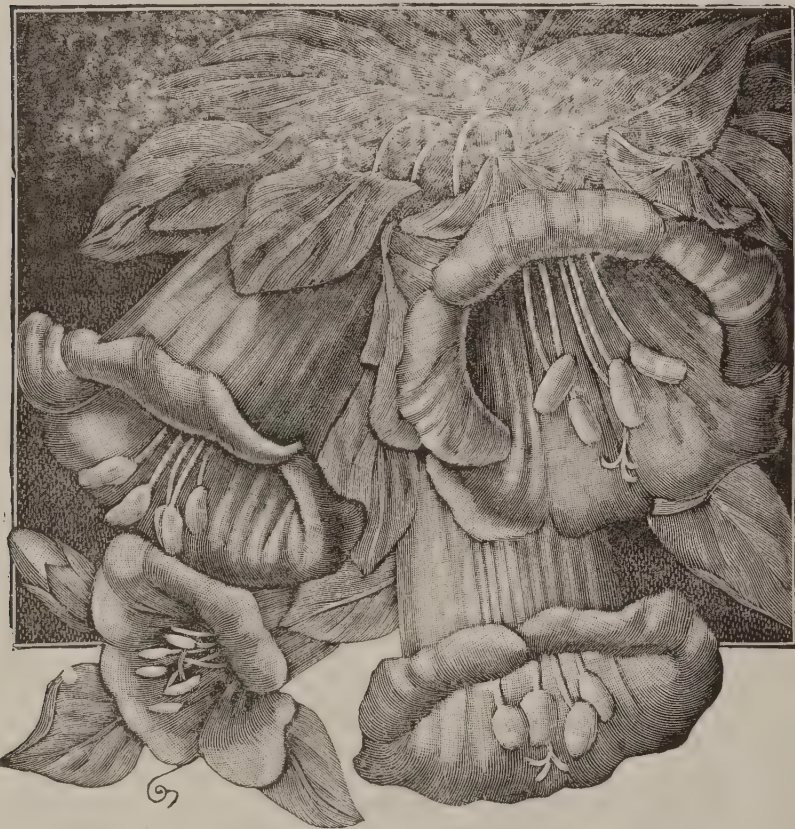
COREOPSIS DOUBLE SUNBURST

Hardy perennial, flowers large, showy, of rich lustrous yellow, semi-double, produced in abundance from June till frost. First rate cut flower. Will bloom the first year from seed if sown early. Height 30 in. If used for forcing avoid heavily manured soil. T. pkt. 10c; oz. 60c; lb. \$4.80.

CUPHEA PLATYCENTRA—CIGAR PLANT

Flowers bright scarlet, foliage clean dark green. First rate for pots and bedding. Half hardy perennial. Height 12 inches.

CUPHEA FIREFLY—New. Tender annual in bloom 14 weeks after sowing. Flowers fiery cerise-red, all summer. Culture same as for bedding Petunias. Height 10 in. T. pkt. 15c; 1/32 oz. 25c.



COBAEA SCANDENS—CLIMBER

CATHEDRAL BELLS—A rapid growing, tender perennial generally treated as an annual. The flowers are bell shaped and of purplish lilac, the foliage is never attacked by insects. Blooms from July to October. Seeds should be placed on edge in planting and plants spaced nine inches apart. Sow in January, place the seedlings in 2 inch pots, then shift and pinch back a few times and when in 4 or 5 inch pots and tied to a stake, will be in bloom by May selling at sight. Of all summer climbers Cobaea is the finest and equally good in sun or shade. T. pkt. 15c; oz. 80c; lb. \$8.00.

IN THE BEST

do we trust. We sell seeds of best quality and what is more, we supply new and superior varieties in flowers and vegetables that cannot be had elsewhere. To have new and superior in seeds is our job. We are not sleeping on the job. All you have to do, is to grow these new things or at least try them, if you do not have enough faith in us. To try is your job. And if you will try what we offer, believe us, you'll not be fooled—you will make money.

Cosmos

When your Cosmos plants will reach the height of about 3 feet, pinch out the terminal bud to induce dwarf growth, and to get flowers from 2 to 3 weeks earlier. Space the plants 18x18 in. Hardy annual.

SENSATION—Flowers single 4 to 5 inches across. Blooms in 65 days from date of sowing. Valuable cut flower. **MIXED**. Pink, white and crimson. T. pkt. 10c; oz. 80c; lb. \$6.00.

COSMOS ORANGE FLARE This new Cosmos displaces the old Klondyke Cosmos. Blooms in less than 5 months from date of sowing. Flowers large, brilliant orange-yellow. T. pkt. 10c; oz. 80c; lb. \$8.00.

COSMOS YELLOW FLARE—Like Orange Flare, flowers of rich golden yellow color. Very floriferous. T. pkt. 10c; oz. 80c; lb. \$8.00.



EXTRA EARLY DOUBLE COSMOS

Will produce about 70% of double flowers 10 weeks after sowing till frost. **MIXED**. PRICE: T. pkt. 15c; 1/8 oz. 30c; oz. \$2.00.

Cynoglossum

Hardy heat and drought resisting annual doing well in any kind of garden soil. A choice garden, rock and pot plant. Easily forced in bloom. Started in September then placed in 4 in. pots will bloom in March-April. Space pots 12x12 in. Night temperature 45 deg. In beds outdoors should be spaced 9-12 in. apart. First rate cut-flower.

CYNOGLOSUM FIRMAMENT (The Sky)—Plants of neat compact growth 15 in. tall and a mass of most beautiful light blue flowers throughout the summer. Extremely showy so much that it is admired even by people that are indifferent to flowers. Try it for spring sales. Use it for display around your premises. T. pkt. 15c; oz. 80c.

CYNOGLOSUM AMABILE—Ultramarine-blue, sweet scented. Height 2 ft. T. pkt. 10c; oz. 60c.

CYNOGLOSUM MIXED—The colors are pure white and shades of blue from deepest blue to light blue. Height 30 in. Pkt. 15c; 1/4 oz. 25c.

CYNOGLOSUM SNOW BIRD—Produces quantities of snow-white flowers from May to frost, high class for cutting, from seed sown from early spring to the end of June. Height 30 in. T. pkt. 10c; oz. 60c.

CYPERUS ALTERNIFOLIUS—Umbrella Plant

Delights in moist places and fine plants can be raised from seed in less than 3 months. Resembles an umbrella. Tender perennial sedge. T. pkt. 10c; 1/8 oz. 20c.

CYPRESS VINE MIXED—T. pkt. 10c; oz. 60c.

CREPIS RUBRA

An annual plant producing from June to August masses of double aster-like flowers, bright dark pink in color of unusual beauty. Fine as a border plant and high class for cutting. Height 18 in. T. pkt. 10c; 1/4 oz. 15c; oz. 80c.

CRUCIANELLA STYLOSA

High class hardy perennial rock, bedding and border plant producing carmine red flowers from May to September in round terminal heads. Cushion-like foliage. Does well in any soil in partially shaded position. Height 1 ft. T. pkt.

DAHLIA Sown either in March indoors or in May outdoors the seedlings produce first class flowers during late summer and fall.

DAHLIA AMANT HYBRIDS

A magnificent strain producing a profusion of big double and semi-double flowers of unusual grace, on long wiry stems, from spring sown seed. Our seed is saved from selected plants that come true, the plants bearing nothing but perfect flowers in many colors, light florists colors predominating. T. pkt. 20c; 1/8 oz. 50c; oz. \$3.00.

DAHLIA—COLTNESS HYBRID

The compact bushes grow only 18 inches high, the large, single flowers are carried above the foliage and completely hide it from view, from early summer till frost. Beautiful colors. High class for bouquets. Of easiest culture. The seed germinates quickly and the plants are in bloom 10 to 12 weeks from date of sowing. T. pkt. 10c; 1/8 oz. 30c.

DAHLIA UNWIN HYBRIDS—Semi-double as well as double flowers, fine for cutting and bedding. Many colors. Seed started early in March produces bloom from June to frost. Height 18-24 in. T. pkt. 20c; 1/8 oz. 40c; oz. \$3.00.

UNWIN and COLTNESS Dahlias are increasingly popular as cut flowers and for bedding. As easy to raise from seed as radishes. You will be surprised at the amount of high class bloom that these Dahlias produce.

DAHLIA ORCHID FLOWERED Different from anything so far seen in Dahlias. Each flower has eight petals, these radiate from the center like a star, are curled and twisted in an elegant fashion and do not look like Dahlias at all. Wide range of colors. Easily raised from seed, will bloom the first year and come 90% true from seed. T. pkt. 20c; 1/8 oz. 45c.

DAHLIA EXTRA CHOICE DOUBLE MIXED—T. pkt. 15c.

DATURA—ANGEL'S TRUMPET

Easily grown annuals, the seed should be planted early and plants set outdoors when danger of frost is past.

CORNUCOPIA—Horn of plenty. Flowers large and double.

white, marbled with blue. Height 3 ft. T. pkt. 10c; oz. 60c.

FASTUOSA COERULA—Large, double, dark blue, scented flowers on plants 3 ft. high. T. pkt. 10c; oz. 60c.

FINEST MIXED—This mixture contains all the best varieties such as Cornucopia or Horn of Plenty, Golden Queen, etc. Oz. 30c; lb. \$2.75; T. pkt. 5c.

DAISY—See Agathea, Arctotis, Bellis, Brachycome, Chrysanthemum, Dimorphteca and Pyrethrum Roseum.

Dielytra-Bleeding Heart

DIELYTRA EXIMIA—Hardy perennial that will thrive in sun or shade, flowers heart shaped, rosy red in color, foliage fern-like, highly ornamental. Height 2 ft. T. pkt. 15c; 1/8 oz. 30c; oz. \$2.00.

DIELYTRA SPECTABILIS—Dormant roots offered elsewhere in this catalog. 100 seeds 20c 500 seeds 60c; 1,000 seeds \$1.00.

DIELYTRA FORMOSA—Plume Bleeding Heart. Flowers just as attractive as those of old fashioned Bleeding Heart, produced from May to frost. The plant is compact, bushy, foliage very ornamental, seen by a flower loving lady you will get an order for the plant or maybe will have to dig it out right away. Worth all the trouble of raising from seed, which lays long before it comes up. Sow in a flat, cover the seed lightly, fill up the flat with sphagnum moss, place in shady place. In about 90 days the seed will begin to sprout. Hardy. Height 2 ft. T. pkt. 15c; 1/8 oz. 30c; oz. \$2.00.

INVEST in Japanese Iris. Easily sold and easily and inexpensively raised from seed. Unexcelled in beauty, the flowers both single and double in many rich colors, wide open with broad petals from 6 to 12 inches across, appear from June to August. Japanese Iris is one of the most heat resisting plants known. Perfectly hardy if planted 3 inches deep. Will produce an abundance of blooms if provided with moisture.

GROW MORE PERENNIALS

There are days during Spring and Summer when the florist does not have enough of his own flowers and has to

buy or miss sales. Both cost money. To prevent this loss, florists should have lots of perennials on their premises, many of which can be raised from seed with little expense. No florist should have bare places on his property where flowers could be growing, advertising his wares to visitors, furnish him blooms and make those unattractive nooks and corners cheerful with beautiful as well as paying flowers. Get the seeds and start the plants. Make every dollar you can, utilize those spots where at present nothing or weeds are growing.

THE BEST PERENNIALS

To make selection easy we arranged all perennials of which we have the seed, into several groups. The best of the list are printed in heavy type and they are the kinds that produce quantities of fine showy flowers and are absolutely hardy without protection. Consequently many a grand flower is not printed in heavy type for the only reason that it is not perfectly hardy in our extremely severe Iowa climate. Bear in mind that our winters are very changeable, we have one day 70 degrees above and in less than 36 hours the temperature is 20 or more below zero. Three or four days afterwards we are enjoying summer weather — for a while. These sudden changes kill many plants that are PERFECTLY HARDY 500 miles further north and everywhere else except here and in Montana, especially so if protected over winter by a layer of straw or hay.

PERENNIALS FOR CUTTING

Achillea, Aconitum, Agrostemma, Anemone, Anthemis, Aquilegia, Armeria, Asperula, Astilbe, Aster Hardy, Bellis, Campanulas, Carnations, Catananche, Centaurea, Chrysanthemum, Cheiranthus, Coreopsis, Commelina, Delphinium, Candytuft, Dianthus, Digitalis, Doronicum, Eryngium, Gaillardia, Geum, Gypsophyla, Hesperis, Heuchera, Iris, Lathyrus, Lavender, Linaria, Lupinus, Lychnis, Myosotis, Pansy Tufted, Pardonthus, Pentstemon, Phlox, Peony, Physalis, Physostegia, Platycodon, Polemonium, Poppy, Primulas, Pyrethrum Rudbeckia, Salvia Azurea, Scabiosa, Silene, Statice, Stokesia, **Thalicrum**, Tritoma, Trachelium, Sweet Violet, Valeriana, Veronica.

ORNAMENTAL PERENNIALS

Not recommended as good cut flowers, although some would pass as such. We are excluding for instance Anchusa, because too coarse, Sweet William because of poor lasting qualities, etc. Our aim is to make these lists dependable and a real help in ordering.

Anchusa, Dictamnus, Hollyhock, Hibiscus, Hyacinthus, Poppy Oriental, Pyrethrum Uliginosum, Oenothera, Sweet William.

HARDY CLIMBERS

Ampelopsis, Aristolochia, Cinnamon Vine, Clematis Paniculata, Lathyrus, Wistaria.

SUITABLE FOR SHADE

Achillea, Aconitum, Aquilegia, Asperula, Campanula, Commelina, Doronicum, Lobelia, Lythrum, Physostegia, Primulas, Trachelium, Sweet Violet.

IRONCLAD PERENNIALS

that will grow and do well in any kind of soil, in hot and dry positions and under the hardest of conditions.

Agrostemma, Arabis, Coreopsis, Gaillardia, Pardonthus, Physostegia, Pentstemon, Rudbeckia, Veronica.

HARDY FOLIAGE PLANTS

Acanthus, Bocconia.

LOW GROWING PERENNIALS

Alyssum Saxatile, Arabis, Bellis, Candytuft Sempervirens, Campanula Carpatia, Myosotis, Polemonium Richardsoni, Pyrethrum Aureum, Pansy Tufted.

DIVIDE YOUR PERENNIALS

Dividing keeps perennials in a healthy and vigorous condition. In dividing them, use your judgment. You can divide most perennials during the summer or early fall except those that bloom in the fall which are best divided in the early spring. Aggressive plants like Anthemis, Physostegia and others should be divided annually, Phlox, Iris and plants with their rate of growth, divide every two or three years. Do not divide: Platycodon, Dictamnus, Gypsophyla and similar plants with carrot-like roots. Peonies should be divided in the fall once in 8-10 years. But in order to increase root stock, divide Peonies once in three years, not oftener, else your roots will go blind.

DIGITALIS—FOX GLOVE

Hardy perennials, 3 to 4 feet tall, bearing large, gorgeously colored, bell shaped flowers on stout and straight stalks from June to September. Blooms the first year if sown early and will prove perfectly hardy if planted in soil with perfect drainage and covered lightly during winter. Easily raised from seed. Water only when it is really needed when the soil is half dry. The plants should stand 12 inches apart. Can be forced, treat same as Delphinium.

GLOXINIAEFLORA—Very large bell shaped flowers rivaling those of Gloxinia. **Pink, White, Purple, Mixed.** Any color. T. pkt. 15c; $\frac{1}{8}$ oz. 35c; oz. \$2.00.

DIGITALIS SPECIAL MIXTURE—Contains all of the choicest varieties with large flowers, self colored as well as tigred, mottled and penciled and is the best mixture in existence. T. pkt. 15c; $\frac{1}{8}$ oz. 35c; oz. \$2.00.

FOXGLOVE GIANT SHIRLEY—Produces flowers of great size, in an endless variety of colors. Beautifully spotted, blotched, self colored, in unique shades of maroon, bronze, cream and others. Of most vigorous growth, the plants attain a height of 6 to 7 feet. T. pkt. 15c; oz. \$2.00.

LUTZII—Plants 4 ft. tall of vigorous growth heavily laden with large bells of a most unusual shade of salmon-rose. T. pkt. 15c; $\frac{1}{8}$ oz. 40c.



DELPHINIUM WREXHAM

Plants 5 to 8 feet tall, the spikes have 36 to 40 inches of flowers, hence the name Hollyhock Delphinium. The colors are shades of blue and violet with white, purple and black-blue center petals. Both double and single. Perfectly hardy. T. pkt. 15c; $\frac{1}{8}$ oz. 30c; oz. \$2.00; lb. \$20.00.

GOLD MEDAL HYBRIDS—Very choice, originally saved from very best named varieties. T. pkt. 10c; $\frac{1}{8}$ oz. 15c; oz. \$1.00; lb. \$14.00.

CHINESE DELPHINIUM

Of brighter color and more satisfactory than most other Delphiniums. Will furnish a wealth of extra fine flowers for bouquets throughout the summer. Height 3 ft. **BLUE—WHITE—MIXED.** Any color: T. pkt. 15c; $\frac{1}{8}$ oz. 30c; oz. \$1.00. All Delphiniums offered by us are hardy perennials.

Delphinium

There are many varieties and strains of Delphiniums. Pacific Giants Hybrids are very outstanding. Most Florists however are staying with the old Belladonna type because the spikes of Belladonna are light and airy and can be used in any kind of floral work which cannot be said of types with very large florets and heavy spikes with florets closely placed on the stalk. You can sow Delphiniums in the spring or in July and August or late in November just before the ground freezes up. The seed will lay dormant and will sprout early in the spring and produce plants with little or no attention. Delphinium will thrive in any good soil in full sunlight but refuses to do well in sour ground. Sourness is corrected by liming. **FORCING DELPHINIUMS.** Generally speaking it is not well to start forcing before Christmas and a temperature of not over 45 degrees at night suffices at the outset. Plant 20 inches apart both ways and twice a month give light applications of liquid sheep manure. Plant in solid beds, loosen the soil deep for every clump. Water only when really needed and never pour water into the crowns.

DELPHINIUM IN THE SOUTH will bloom and furnish a good crop of fine flowers from seed sown in the fall. The Chinese Delphinium never disappoints, the Belladonna type is somewhat unreliable.

DELPHINIUM PACIFIC GIANTS

Flowers $2\frac{1}{2}$ in. to $3\frac{1}{2}$ in. in diameter well formed, symmetrically spaced on straight stems that are solid and whippy and practically 100 per cent double.

DARK BLUE SHADES. LIGHT BLUE SHADES.

CLEAR WHITE. PACIFIC GIANTS MIXED.

T. pkt. 30c; $\frac{1}{8}$ oz. 70c; $\frac{1}{8}$ oz. \$1.35; oz. \$10.00.

The seed of D. Pacific Giants even when absolutely fresh, does not sprout vigorously. Great care must be exercised in order to get a stand. The plants are short-lived. In Iowa they last about 2 years and 500 miles north on our Minnesota farm where Belladonna plants will last for many years, the plants die out in from 3 to 4 years. The trouble lays in the inherent weakness of this highly hybridised Pacific Giant.

BELLAMOSUM—Lamartine. Superior variety for florists use. Flowers large deep gentian blue, white center, single florets, unexcelled for cutting. Height 4 feet. T. pkt. 10c; $\frac{1}{8}$ oz. 25c; oz. \$1.80; lb. \$20.00.

BELLADONNA HYBRIDS—Highly priced for cutting. The plants grow only 3 to 4 ft. high, wind does not blow them down easily, flowers large single and semi-double in all shades of blue loosely arranged on stiff slender spikes. T. pkt. 10c; oz. \$1.00; lb. \$12.00.

DELPHINIUM BELLADONNA LIGHT BLUE—T. pkt. 10c; $\frac{1}{8}$ oz. 15c; oz. \$1.20; lb. \$12.00.

DELPHINIUM ICEBERG

Belladonna type, flowers pure white. Flower spikes 20 inches long carried on good stout stems. Plant of vigorous growth and healthy. T. pkt. 20c; $\frac{1}{8}$ oz. 40c; oz. \$2.00.

CAMBRIDGE DELPHINIUM

(D. Chinensis Cambridge Blue.) Produces numerous spikes of large azure-blue flowers from May to October. Does well in all parts of the country, the entire South included. Height 3 ft. T. pkt. 20c; $\frac{1}{8}$ oz. 35c; oz. \$2.40.

NEW DWARF SCOTCH PINK

You will gain growing these new Pinks if you grow plants for spring sales. The plants are of neat compact growth, do not become "leggy" and straggling, producing large double fragrant flowers in all colors from May to August. You will sell a quantity of these plants either in pots or placed in flats. The plants are only 10 inches high, are first class for borders and rockery. **MIXED COLORS.** T. pkt. 15c; **DIANTHUS SPLENDENS.** D. Heddeiwigli Laciniatus Splendens. Flowers over 2 inches across of brilliant dark crimson with a large snow-white eye produced all summer. Annual. Height 10 inches. T. pkt. 15c; oz. 80c.

DIANTHUS LOVELINESS—New. An exquisite hardy perennial, pink for rockeries with rosy lilac, finely fringed, large, strongly scented flowers produced in profusion in May and June. Height 12-15 inches. 100 seeds 20c.



HARDY PERENNIAL PINKS

SPECIAL MIXTURE—This mixture comprises all the best varieties perennial. $\frac{1}{8}$ oz. 15c; 1 oz. 80c; T. pkt. 10c.

GRASS OR SPICE PINKS—The flowers are large, very double and borne profusely on short stiff stems. Highly fragrant. T. pkt. 15c; oz. \$1.00.

CYCLOP PINKS—Colors of exquisite beauty, enlivened by a eye of velvety red. Has a sweet clove-like perfume. Single. Oz. 60c; lb. \$7.00; T. pkt. 10c.

PLUMARIUS SINGLE—Pheasant eye Pink. Hardy single flowering Scotch pinks. Our strain is extra choice, plants of upright growth, compact, flowers large, fragrant, exquisitely marked and penciled. T. pkt. 10c; oz. 80c.

LATIFOLIUS ATROCOCINEUS—Hardy double hybrid carnation of deepest red. First class cut flower as well as fine pot plant. Height 18 in.

DELTOIDES BRILLIANT—A splendid perennial, forming tufts 6 inches high covered with a sheet of brilliant crimson bloom from May to August. Invaluable as a rock plant for borders and pots. T. pkt. 15c; $\frac{1}{8}$ oz. 25c.

DIANTHUS ARENARIUS—Drought resisting, hardy perennial thriving in poor and sandy soil, producing sheets of fragrant, single heavily feathered, snow-white flowers during May and June. An unusual and very choice rock plant. Height 1 ft. T. pkt. 15c; $\frac{1}{8}$ oz. 35c.

DIANTHUS CAESIUS SPLENDENS—One of the finest of all hardy perennials. The foliage is grass-like, very compact, the bright, rosy-pink flowers are produced in great profusion in June and July. Height 8 in. T. pkt. 20c; $\frac{1}{32}$ oz. 45c.

DIANTHUS CRIMSON BEDDER—A very choice and valuable long lived hardy perennial for bedding, ribboning and rockeries. Flowers 2 in. across single and semi double, glowing velvety crimson. A real flower. Height 12 in. T. pkt. 15c; $\frac{1}{8}$ oz. 35c.

DIANTHUS—ANNUAL PINKS

These bloom from June to October. Height 12-18 in.

CHINENSIS DOUBLE—Flowers double in clusters on strong stems in endless variety of colors all summer. Fine for bouquets, beds, etc. Height 20 in. T. pkt. 10c; oz. 45c; lb. \$6.00.

HEDDEWIGI DOUBLE—Flowers fully double, fringed, carnation-like, 2-3 inches across in many bright colors produced from July until frost. Plants bushy, foot high, fine for cutting, beds, etc. MIXED. T. pkt. 10c; oz. 60c; lb. \$6.00.

MOURNING CLOAK—Rich blackish crimson tipped and fringed with snowy white. Large double and handsome.

PRIZE MIXTURE—Contains all the annual varieties listed as well as many other sorts. T. pkt. 10c; oz. 80c.

DIANTHUS SWEET WIVELSFIELD

The range of colors is almost endless, it is of easiest culture and in bloom from April till frost from seed sown in January under glass. Plants in 5 or 6 inch pots should prove good sellers for Mothers' Day. Height 12 in. Annual.
SINGLE MIXED. T. pkt. 10c; oz. 60c; lb. \$8.00.
DOUBLE MIXED. T. pkt. 15c; $\frac{1}{8}$ oz. 30c.

DIASCIA BARBERAE

Here is a real fine flower of extreme daintiness and elegance, that will be highly appreciated by every florist desiring to make a hit with a flower both unusually beautiful, dainty and rare. Flowers snapdragon like, small, very numerous, born on stout strong and perfectly straight stalks, foot long. In bloom in March to June if started from September to January, and from June to October if started in the spring. Fine rock plant and high class cut flower. Height 1 ft. Annual. Two colors: Rosy pink and salmon pink. MIXED.

DICTAMNUS FRAXINELLA—GAS PLANT

The hardiest and longest lived of all perennials growing about 2 feet high and bearing lemon scented hyacinth shaped flowers during May and June, fine for cutting. WHITE—ROSY RED. Either color. T. kt. 15c; oz. 80c; lb. \$8.00.
PLANTS—2 year old plants, 3 for 50c, prepaid

DIPSACUS LACINIATUS

Teasel. Hardy biennial valuable for winter bouquets. Produces quantities of large conical heads on very long strong stalks and when bronzed is a real ornament. Height 6 ft. T. pkt. 10c; oz. 60c.

Dimorphoteca - African Daisy

Flowers daisy-like 3 to 4 inches across, possessing a brilliant metallic lustre. A good cut flower and a paying item to raise for spring sales. Will bloom in winter if started in August and from May to October if started in January. Under glass, grow in shallow benches, space 8 x 10 in. or grow in 6-7 in. pots several plants in each pot. Temperature 45 deg. Hardy annual. Height 15 in.

ORANGE—Glossy golden orange. SALMON—True salmon-pink. WHITE—Snow white, flowers 4 inches across. LEMON QUEEN—Brilliant lemon-yellow. MIXED. Any color: T. pkt. 10c; $\frac{1}{8}$ oz. 20c; oz. \$1.20; lb. \$10.00.

DORONICUM

Beautiful, perfectly hardy perennials, excellent for cutting, bedding and highly profitable for spring sales. Easily raised from seed, which germinates readily. Sow from March to July. Plants of vigorous growth, thriving equally well in sun or shade. Placed under glass from middle of October to early in November will furnish bloom for Christmas and Easter. Temperature 45 deg. Divide the clumps every 3-4 years.

DORONICUM CAUCASICUM MAGNIFICUM—Extra large, daisy-like, golden yellow flowers, almost 4 inches across during April and May. Height 2 ft. 15 seeds 10c; 100 seeds 50c; 1,000 seeds \$3.75.

DRACANEA INDIVISA

For window boxes, hanging baskets or as a pot plant. An ornamental leaved plant with long, narrow, green foliage. Easily raised from seed which is sown in January in shallow boxes filled with a mixture of soil, sand and leaf mold. It is potted off in April and shifted to larger pots as required; must never be permitted to become pot bound. Lb. \$3.80; oz. 45c; T. pkt. 10c.

DRACANEA AUSTRALIS—Broad leaved variety, popular with many growers. Seed in berries, which must be rubbed out before sowing. T. pkt. 10c; oz. 45c; lb. \$3.80.

To insure quick and even germination of Dracanea seed, place the seed in BOILING water, then remove the vessel from fire, cover up tightly to retain the heat as long as possible—this is a most important point—and allow to soak at least 24 hours—48 hours is still better. Use at least one pint of water to the ounce.

DRYAS OCTOPETALA

An extra choice hardy perennial rock plant producing large, white, anemone like flowers in abundance in April and May. Must have well drained soil. Foliage evergreen. To prevent the foliage from having a scorched appearance the plants should be covered over winter with brush or corn stalks. Seed germinates slowly. Height 6 in.

DRACOCEPHALUM BUYISHIANUM JAPONICUM—Hardy perennial border and rock plant producing an abundance of blue flowers suitable for cutting from June to October. Height 18 in. T. pkt. 10c; oz. 80c.

ERIANTHUS RAVENNAE

Plume grass. The plumes resemble pampas grass and are useful in dried bouquets. Easily raised in ordinary garden soil in sunny situation. Hardy perennial. Height 4 to 7 ft. T. pkt. 10c.

ECHEVERIA—HEN AND CHICKEN

Beautiful plants desirable for bedding, carpeting, rockeries and pots. The foliage is thick and fleshy, a neat rosette fully as attractive as a flower. The color of these rosettes varies from green to white as well as red and pink and some species have a metallic lustre. The flowers are in shades of yellow, orange, red and white and last when cut for weeks, developing new flowers on the cut stalks. Tender perennial.

The seed is very fine, should be started in soil composed of rich garden soil, leaf mould and sharp sand in a temperature of 50 deg. at night or less. Seed germinates in from 3 to 4 weeks. Do not water overhead.

DE SMETIANA—The leaves are thick and present a look as if they were covered with white powder. Particularly beautiful and desirable. Height 6 in.

ECHEVERIA MIXED—Our mixture contains many very fine species ranging in height from 6 to 18 in.

ECHEVERIA RETUSA HYBRIDA—Winter blooming greenhouse perennial. Flowers large on strong stems 18 inches long in shades of orange, scarlet and carmine red. When cut will last a month in a vase. Highly priced as a cut flower in Europe.

ECHEVERIA CARNICOLOR

Of the Hen and Chicken family easily and inexpensively raised. Flower heads four inches across, color the most brilliant vermilion-red with some flowers of brilliant orange, contrasted to metallic bluish-green foliage. Very high class. Will bloom for Christmas and being a comparatively new plant will sell. Height 12 in.

ECHINOPS RITRO—GLOBE THISTLE

A rank growing hardy perennial, valuable for producing sub-tropical effects in the garden and furnishing flowers of bright metallic blue in large globular heads very striking and highly valuable for winter bouquets. Handsome foliage, deep green above, silvery beneath, in bloom from July to September. Height 3 ft. T. pkt. 15c.

EREMURUS

The plants grow 5-6 feet tall, the great flower stalks are crowned with spikes of flowers 2 to 3 feet long and are a sight not easily forgotten. Hardy perennial, lasting for many years. The seed lays from 10 to 12 months before it sprouts. Sow the seed in flats, cover with moss, water when needed. You will wait for results but when these do come, they will be worth while. You can sell your plants at from \$1.00 to \$3.00 per plant and there will be plenty of calls.

EREMURUS HIMALAICUS—Long spikes of white flowers in June, July and August. The hardiest of all Eremurus. Height 6 ft.

ERIOPHYLLUM CAESPITOSUM

A wonderfully showy, hardy perennial with velvety gray foliage and large, golden yellow, double, aster-like flowers in May and June; unexcelled for dry border and rockery. Height 10 in.

ERINUS ALPINUS

Hardy perennial rock and pot plant producing in May and June numerous racemes of dainty small, violet-red flowers. Easily raised. Sow in flats later pot up singly. Thrives in almost any soil in full sun or partial shade. Must have perfect drainage. Height 6 in.

ERYSIMUM

Early flowering perennials, easily raised from seed, dependably hardy if planted in well drained and rather dry soil. Fine for bouquets and excellent for rockeries.

ERYSIMUM PULCHELLUM—Produces a wealth of bloom in May and June. Flowers sulphur yellow. Height 6-12 in. T. pkt. 10c; 1/8 oz. 15c; oz. 80c.

ERYSIMUM RUPESTRE AURANTIACUM—Of striking beauty, flowers of true orange color during May and June. Height 12 in. T. pkt. 15c; 1/16 oz. 25c.

ERYSIMUM ORANGE GEM—Of a true orange color, brilliant and vivid, a color rarely seen in nature. Resembles in formation of bloom true wallflower. Can be sown late in autumn, just before hard frosts or early in the spring. Blooms 10 weeks from date of sowing, stays in bloom for two months. A fine flower for bouquets. Modern and popular in Europe. Annual. Height 2 ft. T. pkt. 10c; 1/8 oz. 15c; oz. \$1.00.

ERYTHRINA CRISTA GALLI

Coral Tree. Half hardy shrub of striking beauty rarely seen. Produces during summer masses of brilliant crimson bloom in large terminal racemes. Easily raised from seed. Sow in May in a deep flat with 4-5 inches of dirt. By fall you will have strong plants two feet tall. Store the flat inside over winter. Next May plant out three feet apart in full sun. A group of these plants produces an immense effect. Then every fall lift the fleshy roots and store over winter like dahlia roots. South of St. Louis stands out of doors if protected. Height 5 ft. 8 seeds 20c; 25 seeds 60c; 50 seeds \$1.10.

To insure quick and even germination of Erythrina nick the seed with a sharp knife before planting.

EULALIA JAPONICA—Ornamental Grass, very handsome as single specimen or in groups. Height 4 to 6 ft., depending on how rich the soil. Hardy with protection. T. pkt. 15c.

ESCHSCHOLTZIA—CALIFORNIA POPPY

Of low spreading growth, excellent as border plants or in masses. Sow the seeds where the plants are to remain, thin out to a foot apart, if you fail to do this you will get no blooms. Does splendidly in our climate and grows readily from seed. Annual. Height 10 inches. Special Mixture: T. pkt. 10c; 1 oz. 45c; lb. \$4.60.

ESCHSCHOLTZIA MOGUL—An extra choice variety of erect, dwarf, compact growth, unexcelled for groups, borders and of the highest value for covering graves. Thrives in any kind of soil and is a mass of bloom from May to October. Color orange, shaded crimson. Height 12 in. T. pkt. 10c; oz. 40c; lb. \$4.00.

EUPHORBIA

The seed of annual varieties germinates promptly the seed of perennial varieties germinates mostly promptly but very unevenly. Sow the annuals in the spring the perennial varieties real early in the spring or very late in the fall in the open. Euphorbias are interesting plants, some are of exquisite beauty (E. Polychroma, which should be cut back when through blooming). They do well in almost any kind of soil if fully exposed to the sun.

HETEROPHYLLA—(Mexican Fire Plant). An annual resembling hot house poinsetta. The plants are of branching bush like form, with smooth, glossy foliage. About midsummer the center top leaves of each branch turn a vivid orange scarlet. Plant in rich soil and a sunny location about 9 inches apart. Height 2 to 3 feet. T. pkt. 5c; oz. 40c; lb. \$4.00.

VARIEGATA—(Snow on the Mountain or Mountain Spurge). Plants 2 feet high with beautiful foliage veined and margined with white. Annual. Height 2 feet. T. pkt. 5c; oz. 40c; lb. \$3.50.

EUPHORBIA MYRSINITES—If you are looking for something odd, quite out of the ordinary, a plant possessing beauty and charm, try this Euphorbia. A trailing plant laying flat on the ground but not rooting itself. Its branches, only about two feet long, with clean grayish green, sharply cut foliage, spread from the center in a star-like formation and are an attraction in beds or in the rockery from spring till frost. Hardy perennial. T. pkt. 15c; 1/8 oz. 30c; oz. \$2.00.

EUPHORBIA COROLLATA—Hardy perennial, in bloom during August and September. It is a native or "wild" flower but one of uncommon beauty and highly useful as it comes right after hardy Gypsophylla is out of bloom. Of same usefulness as Baby's Breath, flowers snow-white in large clusters. A very elegant flower. Demands freezing weather to germinate its seed. You will get a good stand if you will sow the seed late in October outdoors. Height 3 ft. T. pkt. 20c.

EUPHORBIA POLYCHROMA—An uncommon very beautiful easily raised hardy perennial rock plant forming compact half globes covered with golden yellow bloom in May and April. The plants when in bloom sell at sight. Height 16 in. T. pkt. 20c; 1/16 oz. 45c.

EUPATORIUM FRASERI

Hardy perennial valuable for cutting. Flowers snow white, in clusters, neat and pretty from July to October. Of easy culture. Treat same as Stevia. Can be forced into bloom during winter. Also good for pots. Very floriferous. Height 2 ft.

ERIGERON SPECIOSUS HYB. GRFL.

Absolutely hardy perennial of sturdy compact growth 3 ft. tall, bearing on single stalks 20 to 30 aster-like blooms about two inches across. The ray-like petals are in four layers around the small yellow disc making the flowers elegant and artistic. Good for cutting. In bloom during June and July and again very late in fall. T. pkt. 10c; 1/8 oz. 20c; 1 oz. \$1.20; lb. \$12.00.

ERIGERON AZURE BEAUTY—Flowers bright blue, mostly double, in June-July. High class for cutting. Hardy perennial, height 3 ft. T. pkt. 15c; 1/16 oz. 30c.

ERYNGIUM AMETHYSTINUM

Hardy perennial. The odd shaped steel blue flowers are useful in winter bouquets. Sow the seed from March to July. Height 30 inches. The seed germinates unevenly and lays about 8-10 weeks before sprouting. Pkt. 10c; oz. \$1.00.

ERYNGIUM AGAVEFOLIUM—Produces extra large, globular ivory-white heads. When bronzed is a real ornament in a winter bouquet. Height 30 in. T. pkt. 15c; 1/8 oz. 25c.

EVERLASTING FLOWERS MIXED—T. pkt. 10c; oz. 60c.

EXACUM AFFINE

An elegant pot plant producing from June to frost hundreds of small, star-shaped, beautiful blue fragrant flowers if sown in February. Use rich soil, place 2-3 plants in a pot. Seed very fine but germinates readily. Annual. Height 6 in.

FELICIA BERGERIANA

An annual with neat turf like foliage producing a wealth of daisy like, brilliant ultramarine blue flowers over a long period. A flower of great beauty, high class for pots and rockeries. Height 6 in. T. pkt. 15c; 1/16 oz. 25c.

FERN SPORES

Fresh spores saved from best and choicest greenhouse varieties. **FINEST MIXED.** T. pkt. 25c; 1/64 oz. \$1.00. For cultural directions see page 60.

FESTUCA GLAUCA

Blue Fescue. A hardy perennial ornamental grass, forming dense cushion-like tufts of attractive blue-gray color, fine for rockeries and low borders.

FOUR O'CLOCK—MARVEL OF PERU

Our mixture contains a fine variety of colors. Height 2 ft. Oz. 40c; lb. \$3.00; T. pkt. 10c.

Freesia

Highly paying as a cut flower and pot plant. For pot culture, place 6-8 small bulbs in a 4 in. pot, using rich sandy loam. For a crop of cut flowers plant the seed in benches with 6-8 in. of soil in a cool house as close as possible to the glass, in rows 8 in. apart and an inch apart in the rows, covering the seed lightly. As soon as the plants are large enough to handle, transfer them into pots or flats. The seed lays four weeks before it germinates but once up, the plants develop fast. When the plants get 2 in. high, apply weak liquid manure liberally, keep shaded on hot sunny days, give plenty of ventilation (this is very important) and maintain a temperature of 40 to 45 degrees. You will raise from seed in 4 to 5 months a perfect crop of flowers of better grade than you can from bulbs and you are sure of success provided you will ventilate, grow them cool and not too far from the glass. Make successive sowings from August to February. **REFRACTA ALBA**—Pure white, fragrant flowers. Height 1 ft. T. pkt. 10c. **NEW HYBRIDS (Ragioneri)**—The flowers comprise shades of pink, blue, orange, red, etc., often delicately spotted and veined.

FREESIA TUBERGENI—Most valuable strain, flowers extra large, of extraordinary firmness in many brilliant colors.

FREESIA REFRACTA CANDIDISSIMA. New. Flowers of purest white, of giant size, truly magnificent.

FREESIA HYBRIDA BUTTERCUP. New. Large flowered buttercup yellow.

FUCHSIA HYBRIDA

An excellent house plant, and fine for shady places, where few other plants will answer. They make a flowering plant from seed in less than a year and come true from seed. Half hardy perennial, will stand slight frost. Do not grow them in a warmer house than 50 degrees at night. 20 seeds 20c; 100 seeds 70c.

FUCHSIA DWARF DOUBLE This new race produces from seed, extra large extra double flowers in many colors on plants only 12 inches tall. Comes about 80% true from seed. 25 seeds, 30c; 50 seeds, 50c.

GAILLARDIA BEAUTIFUL STAR Of high value to the florist. Flowers double, ball shaped of elegant form, two inches across, in many attractive colors. A few plants will furnish the florist valuable bloom from spring to frost as the plants are very floriferous and when a crop is cut new crop of flowers appears. Hardy annual. Height 2 ft. T. pkt. 10c; oz. 60c; lb. \$8.00.

LORENZIANA DOUBLE MIXED—Annual. Very valuable as a cut flower producing large blooms in many colors on long stalks that last a long time in water. T. pkt. 10c; oz. 60c; lb. \$6.00.

GAILLARDIA INDIAN CHIEF—Although an annual it is of value to the florist. Plants of compact growth 20 in. high, flowers single of perfect form and of deepest metallic mahogany red color that takes the eye, from July to frost. Fine for bedding and cutting. T. pkt. 10c; oz. 60c.

PERENNIAL GAILLARDIAS

GAILLARDIA GRFL. NEW HYBRIDS—These hybrids embrace varieties with flowers of mammoth proportions both single and semi-double. The colors are pure yellow, brilliant crimson, crimson edged white, blood red bordered yellow, brownish crimson, etc. T. pkt. 10c; 1/2 oz. 15c; oz. 80c; lb. \$9.00.

GAILLARDIA BURGUNDY—Of all hardy perennial Gaillardias, Burgundy is the most showy. Flowers single 4 inches across, color a striking shade of copper red with a metallic lustre. Like other Grandiflora types blooms the same year if sown fairly early. T. pkt. 15c; 1 oz. \$1.20.

GAILLARDIA GRANDIFLORA THE KING—New. Flowers of immense size, six inches and over in shades of gold and red. T. pkt. 15c; 1/2 oz. 30c; oz. \$2.00.

GALEGA BICOLOR HARTLANDII

Hardy perennial, producing from May to September, quantities of pea-shaped, white and lilac flowers on long stalks, fine for cutting. Height 3 ft. T. pkt. 10c; oz. 60c.

GENISTA HYBRIDA—Free flowering, robust growing perfectly hardy hybrids in pink, scarlet, buff and orange throughout summer. Sow early, pot off singly, set out where to stand, as the plants resent transplanting. Seeds germinate unevenly. Height 4 ft. T. pkt. 40c.

GENTIANA ANDREWSI—Bottle Gentian. Flowers clear blue to intense dark blue, in large clusters from June to September. Does well in any moist soil in sun or shade. Seed germinates slowly. Absolutely hardy. Height 1 ft. T. pkt. 15c.

GERBERA—TRANSVAAL DAISY

Half hardy perennial easily forced into bloom during winter (night temperature 45-48, never more). Fine cut flower, unsurpassed in keeping qualities. Height 18 in.

Sow the seed in soil composed of sod loam, leaf mould, sand and some WELL decayed manure. Cover with a layer of one-quarter of an inch of soil and over the soil place a layer of sawdust or peat an inch thick. Soak the bed thoroughly and cover with burlap to preserve moisture. The seed will be "up" in 10-14 days. Leave plants in seed bed from 4 to 6 months, then transplant foot apart each way. Keep the crowns above the ground. Keep the roots moist, crowns dry. Water once in 3 weeks when the ground is really dry and when you water, do so thoroughly. After each watering stir the top soil. Grow in deep benches. Solid beds are still better. NEVER use fresh manure. When cutting leave 3 inches of stem. Cutting closer than 3 inches means that the short stump dries in, reaches the crown and that ends the further growth of the plant.

SPECIAL MIXTURE—Contains the French and German strains that have created a sensation in the floral world. 20 seeds 15c; 100 seeds 40c; 1,000 seeds \$2.60.

GERBERA SCARLET SHADES—20 seeds 15c; 100 seeds 40c; 1,000 seeds \$2.80.

DOUBLE GERBERA—The flowers are very large and full and include a wonderful range of beautiful colors such as cream, yellow, orange, scarlet, pink, salmon, purple and violet. Just as vigorous in growth as the single variety.

GESNERIA CARDINALIS

A handsome pot plant about a foot high, producing spikes of highly attractive flame-red flowers from Easter on if planted in heat in December. Should prove a ready seller being really beautiful and NEW. Culture same as for Gloxinia, however, Gesneria is much easier to raise than Gloxinia, it is more hardy. Pinch several times in order to get nice bushy plants.

GLOBULARIA TRICHOSANTHA

Globe Daisy. A dwarf, tufted, perfectly hardy perennial, with beautiful double flowers from May to July. Fine rock, bedding and pot plant. Does best in partial shade. Height 1 ft. T. pkt. 20c.

GLOXINIA

Can be started from seed at any time and brought into bloom in 6 months from date of sowing. Sown in October will produce bloom for Easter, sown late in July blooms for Christmas. Sow in flats thinly, press the seed to the soil—do not cover the seed with dirt or sand. Cover the flat with a pane of glass. The seed germinates best in a temperature of 65 deg. Transplant as required from one flat to another then into pots and let them come into bloom in 5 inch pots. The potted plants must not be allowed to get pot-bound. When in six inch pots use liquid manure once a week. Stop using liquid manure when the bloom appears. Avoid drafts. Use rich soil mixed with about a third of sharp sand. Never pack the soil in pots or flats too hard. This to be sure of perfect drainage.

GLOXINIA BLUE WONDER (Rasse Glerth)—Received first prize at the Dresden Exhibition. The most vigorous of all gloxinias blooming in five months from date of sowing, producing 40 to 70 blooms per plant of brilliant velvety blue. Try this new gloxinia. You will find it a highly paying plant. T. pkt. 40c.

TIGRED AND SPOTTED GLOXINIA—Finest varieties mixed. Unsurpassed for variety and brilliancy of color. Best German grown. T. pkt. 30c; 1/64 oz. \$1.60.

GLOXINIA REGINA HYBRIDA—(Sinningia). **IMPERIAL GLOXINIA**—Splendid robust growing, dark leaved hybrids, mostly erect flowered. T. pkt. 25c; 1/64 oz. \$1.75.

GAILLARDIA SUN GOD Hardy perennial Grandiflora type. Flowers very large, both the center as well as the petals of bright deep chrome yellow. Very distinct, entirely different from the general run of Gaillardias, high class for cutting. Height 3 ft. Comes about 60% true from seed.

GEUM COCCINEUM

MRS. BRADSHAW—Hardy, perennial, easily raised from seed. Blooms profusely from June to August. Blooms resemble carnations; are large, half double, fiery scarlet. Height 24 inches. Do not hesitate to grow this flower; it is well worth while. T. pkt. 10c; 1/8 oz. 20c; oz. \$1.40.

GEUM LADY STRATHEDEN—Flowers rich golden yellow, very large and full, fine for cutting. Height 2 ft. T. pkt. 10c; 1/8 oz. 25c; oz. \$1.90.

GEUM BORISII—Flowers glowing orange-scarlet from June till late fall. Fine hardy perennial rock plant. Height 15 in.

GEUM HELDREICHII—Magnificent deep orange red flowers during May and June. Splendid rock plant. Height 1 ft. T. pkt. 40c.

GEUM, PRINCE OF ORANGE—Vivid true orange. Height 2 ft. T. pkt. 15c; 1/8 oz. 50c.

GERANIUM ZONALE

Seed saved from finest named large flowering varieties. The seed will produce flowers of perfect form the first summer. Sow in February to the end of March. Cover the seed lightly. T. pkt. 15c; 1/8 oz. 40c; oz. \$2.80.

GILLIA CORONOPIFOLIA Excellent cut-flower. Hardy biennial but sows itself, therefore as good as a perennial. Produces graceful, foot long spikes of a rich and rare shade of red on stout stalks 4 ft. long in May and June. Remarkably beautiful, greatly admired wherever seen. Sown in January or February blooms the same Autumn. Brought to market in full bloom will create a near sensation. The cut bloom sells "like hot cakes." T. pkt. 10c; 1/16 oz. 20c; 1/4 oz. 30c.

GILLIA MICRANTHA ROSEA—Of the greatest value for bedding. In sunny spots. Profuse bloomer, the neat compact growing plants are literally smothered with bloom from May to October. The flowers resemble single dahlias and are of a vivid rose pink color. Height 8 in. T. pkt. 10c; oz. \$1.00.

Gomphrena

Easily raised hardy annual, producing masses of neat globular clover-like flowers from June to frost on stems 9-12 in. long. Skillfully arranged a vase of these flowers makes a surprisingly pleasing effect. Dried will last and keep its bright colors for months. Height 2 feet. Also known as Globe Amaranth and Bachelor's Button.

WHITE, CRIMSON, PINK, ORANGE, MIXED. Any color: T. pkt. 10c; oz. 45c; lb. \$4.00

GOMPHRENA DWARF RED—Of compact even growth. useful for pots and borders. T. pkt. 10c; oz. 45c; lb. \$4.00 Height 6 in. Annual.

GREVILLEA ROBUSTA—SILK OAK

Beautiful plant with fern-like foliage for pots, hanging baskets, window boxes, etc. Can be started from seed at any time, is easily and inexpensively raised and will stand more neglect than almost any other house plant. To get plants for use with Poinsettias sow in February and March. If for spring sales sow in June. Start in flats, place in 2 inch pots, when the plants are large enough to handle shift as needed and water sparingly during winter. It takes 12 months to get a specimen plant requiring 4-6 inch pot from date of sowing. Tender perennial. T. pkt. 20c; oz. \$2.20.

CLIMBING FOXGLOVE (*Lophospermum Scandens*)—A tender annual climbing plant of rapid growth bearing lovely pink flowers resembling foxgloves from July till frost. Height 10 feet.

GOURDS SPECIAL MIXTURE Contains choicest small as well as large varieties. Gourds are unexcelled for making bird houses and fancy original table lamps. T. pkt. 10c; oz. 45c; lb. \$1.50.

ORNAMENTAL GRASSES

MIXTURE—Contains only the best and most ornamental varieties both annual and perennial. The seedlings cannot be told from sprouted weeds. Mark all sowings of Ornamental Grass in a conspicuous way so that the seedlings will not be pulled up as weeds. T. pkt. 10; oz. 45c. See also: Agrostis, Arundo, Briza, Coix, Cyperus, Erianthus, Eulalia, Lagurus, Pennisetum, Stipa, Tricholaena.

MUST HAVE perfect drainage when it comes to cactus. Poor to medium rich soil when it comes to Amaranthus. Godetias and Clarkias must have poor soil and kept thirsty. Blue Lace Flower must have some sand and a little of peat does it much good. Gypsophyla must have sunlight, never any shade, etc. There are many must haves, all are mentioned in cultural directions referring to each flower group. It is important to pay attention to these directions to avoid disappointment.

Godetia

There are few plants more profitable to grow for spring sales than Godetia. Start in January-February and you will have blooming plants that will be greatly admired in April and May. The plants will find buyers very fast. Grow Godetia in POOR soil, say one part of rich soil and 3 parts of sand or sifted ashes and water VERY sparingly. That is the secret of success. Sown in April Godetias bloom from June to September. Try Godetias, if you will be not struck with its beauty, it will be past our understanding. Godetias are excellent cut flowers, pot plants and planted outdoors in sandy or gritty soil in a large bed will attract much attention.

DOUBLE SCHAMINI

Large flowered type with double flowers of striking beauty, excellent for florists' work. Height 2 ft.

SCHAMINI CARMINEA—Rich pink, center carmine, easily the richest of Godetias and valuable for florists' work.

SCHAMINI CRIMSON—Intense crimson.

SCHAMINI LILACINA—Beautiful light mauve.

SCHAMINI ROSY MORN—Bright coral pink. Splendid.

SCHAMINI MIXED—Many bright colors. Price: Any of the above. T. pkt. 10c; 1/8 oz. 15c; oz. 80c.



Godetia Crimson Glow

GODETIA CRIMSON GLOW—Of close compact growth, flowers single, intense dazzling crimson. Height 10 inches. T. pkt. 10c; oz. 60c.

KELVEDON GLORY—Large wide open single flowers of striking beauty, freely produced. Color deep glowing salmon-orange. Plants compact and neat, 15 inches tall. T. pkt. 10c; 1/8 oz. 15c; oz. 80c.

GODETIA THUNDERBOLT

If you want to show your customers a pot plant with a large bunch of boldly colored bloom Thunderbolt will fill the bill. Flowers large, single, of an extreme dark shade of crimson. Plants compact, ideal for pots. Height 12 in. T. pkt. 10c; 1/8 oz. 20c.

MAIDEN'S BLUSH—Flowers very large and double, rich rose-pink, plants compact, covered with bloom. Height 10 in. T. pkt. 15c; 1/16 oz. 25c.

SWEETHEART—The very double, azalea-like flowers of brightest shell-pink completely hide the foliage of the plant. A grand variety. Height 16 in. T. pkt. 10c; 1/8 oz. 20c; oz. \$1.20.

GODETIA DWARF MIXED—Choicest named varieties, mostly double. Height 12 to 15 inches. T. pkt. 10c; 1/8 oz. 15c; oz. 80c.

GYPSOPHYLA OLDHAMIANA

Hardy perennial, producing wide open, single, light pink flowers in large heads in sheets from August to frost. First class for cutting. Height 30 in. T. pkt. 15c; 1/8 oz. 20c; 1 oz. \$1.20.



GYPSOPHYLA—BABY'S BREATH

The Elegans section are annuals, others are hardy perennials. Gypsophyla Elegans can be sown every two weeks from January up to the end of September producing highly valuable material. Do not sow Elegans in October and November as sowings in those two months produce NO flowers.

ELEGANS GRANDIFLORA—Large flowers, pure white, 8-9 petaled strain. T. pkt. 5c; oz. 15c; lb. \$1.80; 5 lbs. \$7.00, prepaid.

ELEGANS CARMINEA—Rich rose pink, fine for cutting. T. pkt. 10c; oz. 30c.

ELEGANS DELICATE PINK—T. pkt. 10c; oz. 30c.

GYPSOPHYLA PANICULATA SINGLE—Height 4 ft. T. pkt. 10c; oz. 45c; lb. \$4.00.

PANICULATA—F. pl. double. T. pkt. 15c; ½ oz. 30c; 1 oz. \$2.00.

GYPSOPHYLA SNOWFLAKE New. Hardy Paniculata type that blooms four weeks ahead of the old type of perennial Gypsophyla. The flowers are pure white, double and our selected strain produces close to 90% of double flowers from seed. T. pkt. 30c; 10 pkts. \$2.75.

GYPSOPHYLA FLOWERING CARPET

New. (Gypsophyla Sundermannii). Perfectly hardy perennial only 4 inches tall, a single plant covering about a square foot of ground. Not of creeping habit. The flowers resemble in shape and almost in size the flowers of Gypsophyla Elegans and are produced from May to August in such abundance that the plants are completely covered and clear out of view. One sees nothing but a solid sheet of white bloom. Greatly admired in our trial grounds.

HUNNEMANIA—TULIP POPPY

Very showy hardy biennial treated as an annual with beautiful feathery glaucous foliage producing tulip shaped flowers with crinkled satiny petals 3 inches across on stout stems foot long, from early spring to frost. The flowers last two weeks in water and several days out of water. Plants of bushy growth 30 in. tall. Cut when partly open. Give rich, well-drained soil. Hunnemanian is not easy to transplant.

HUNNEMANIA FUMARIAFOLIA—Bright yellow.

HUNNEMANIA SUNLITE—Flowers canary yellow, semi-double, high class for cutting. T. pkt. 10c; ½ oz. 15c; oz. \$1.00. GEUM is not dependably hardy with us but it will come through if protected over winter, with brush or similar coarse material.

CONSULT the front pages of this catalog. Read the description of the new Tomato Firesteel, a truly wonderful new variety that every gardener should try no matter where located.



Helichrysum

HELICHRYSUM—STRAWFLOWER

One of the best strawflowers. Flowers double, very large, making a first class cut flower. Gather the bloom when partially unfolded and suspend with their heads downward in a shady place. Hardy annual, blooming from June to October. Height 2 feet. Sow the seed early in the spring, transplant to stand 18 inches apart. For best results plant in well-drained soil in full sun. **SILVER BALL**—white; **CRIMSON**; **GOLDEN BALL**—yellow; **CARMINE ROSE**; **PINK**; **VIOLET**; **SCARLET**; **FIREBALL**—red; **MIXED**. T. pkt. 10c; oz. 80c; lb. \$8.00.

HELIANTHEMUM ROTUNDIFOLIUM

Bears in profusion double flowers, glowing carmine rose in color from April to August. Extra good for rockeries and borders. Hardy with light protection over winter. Height 1 foot. T. pkt. 15c.

HELIOTROPE

Sow in January to March, pot off and shift as necessary. Will bloom in May or June. Make cuttings in July for winter flowers. Must have good drainage and never suffer from lack of water.

MAMMOTH MIXED—Tall growing varieties with large strongly perfumed flowers. Height 2 ft. T. pkt. 15c; ½ oz. 30c; ½ oz. 55c.

QUEEN MARGUERITE—This is the finest dwarf extra large flowered, strongly scented variety, with deep blue flowers. T. pkt. 15c; ½ oz. 30c; ½ oz. 55c.

HELIOTROPE FLORINA—Extra dwarf only 15 inches tall, flowers large, fragrant, light blue.

HELIOPSIS LEMONEI

Hardy perennial of neat compact growth, flowers golden yellow, daisy-like semi-double 4 inches across from July to October. Extremely floriferous drought and heat resisting. Good for cutting. Height 30 in. T. pkt. 20c; ½ oz. 35c.

HESPERIS NANA CANDIDISSIMA

In bloom April-May, plants of compact bushy growth covered with glistening snow-white fragrant bloom. Fine cut flower and pot plant. Perennial, hardy with slight protection. Height 20 in. T. pkt. 10c; oz. 80c; lb. \$8.50.

HESPERIS MATRONALIS—Sweet Rocket. Hardy perennial 2-3 ft. tall, zeasing in abundance large flat heads of single stock-like flowers from May to August. **PURPLE**, **WHITE**, **MIXED**. Any color. T. pkt. 10c; oz. 45c; lb. \$4.00.

HESPERIS NIVEA—An especially choice perennial 18 in. tall, flowers white, double, fragrant and as cut flower extremely desirable. Blooms in May.

HEDYSARUM CORONARIUM French Honey-suckle — Flowers bright red, fragrant in long racemes suitable for cutting from June to August. Will bloom the first season if started early. Hardy with slight protection. Height 2-3 feet.

HELENium HOOPESI

A fine perennial about 30 in. high, flowers orange yellow, daisy-like, of elegant form, in bloom during May and June.

HELENium RIVERTON GEM—Robust growing perennial, bearing quantities of daisy-like, reddish bronze flowers from July to October. Height 3½ ft. T. pkt. 10c; ¼ oz. 25c.

HELENium BIGELOWI—Very large, daisy-like flowers, deep yellow, disc black, borne on long, stout stems during August, fine for cutting. Hardy. Height 3 ft. T. pkt. 15c; 1/16 oz. 30c.

HIERACIUM VILLOSUM

Hardy perennial that will make money for its grower because in bloom in May and June. The bright canary yellow blooms are very double, the size of a half a dollar piece, the leaves are sparkling silvery gray, quite attractive. Perfectly hardy, of vigorous growth, easily raised from seed. Height 12 in.

HEUCHERA SANGUINEA—CORAL BELLS

This is one of the finest hardy perennials with red flowers, excellent for bouquets, blooming from early spring till frost. Does well in full sunlight as well as when partially shaded. The color is a vivid shade of coral red, perfectly charming. Height 2 ft. T. pkt. 20c; 1/16 oz. 35c; ½ oz. 65c.

HEUCHERA SANGUINEA SPLENDENS—Flowers bright vermilion red. Superbly beautiful. High class cut flower and rock plant. Height 2½ ft. T. pkt. 20c; 1/16 oz. 40c.

HEUCHERA HYBRIDA GRANDIFLORA—Large flowering. Very choice cut flower. Many colors from white to glowing crimson. Height 2½ ft. T. pkt. 20c; 1/16 oz. 40c.

HIBISCUS—MALLOW MARVELS

Robust growing, hardy perennials producing in July and August on long branches, beautiful cup-shaped flowers of immense size seven inches across. For store decoration, for maximum effect and to show the public something out of ordinary there is nothing better than Mallow Marvels. Height 6 ft.

PINK, RED, WHITE with crimson eye. **MIXED.** Any color: T. pkt. 10c; oz. 60c; lb. \$6.00.

HOLLYHOCK CHATER'S DOUBLE

BLACK, BRIGHT RED, bright crimson, **MAROON, PINK**, (Newport Pink, pure pink), **SALMON ROSE** (Colorado Sunset or Queen of Sheba), **SCARLET BEAUTY**, fiery scarlet, **YELLOW** clear sulphur yellow, **DOUBLE MIXED.** (**CHATER'S PRIZE.** Price the same for all: T. pkt. 10c; ½ oz. 25c; oz. \$1.80.

HOLLYHOCK EXQUISITE—The flowers are extra large, fringed and curled, very double with white margined petals in various shades of pink, rose, claret, violet and purple. T. pkt. 15c; ½ oz. 25c; oz. \$1.60; lb. \$20.00.

HOLLYHOCK TRIUMPH—Of branching habit, 5 ft. tall, studded with waved and fringed double flowers which appear in as many as 45 distinct colorings. Blooms 10 days ahead of other hollyhocks. T. pkt. 20c; 1 oz. \$1.20.

HOLLYHOCK INDIAN SPRING—Produces semi-double flowers 5 inches across of rosy carmine color from July to October from seed sown early in the spring. Height 5 ft. Annual. T. pkt. 15c; ½ oz. 20c; oz. \$1.00.

HYPERICUM ORIENTALE

Highly desirable hardy perennial rock and border plant producing large, cup shaped flowers of intense bright yellow. The petals of the flowers seem to be made out of gold and a genuine pleasure is derived by growing this plant. Blooms all summer. Does best in light, warm, sandy soil in a spot where the noon sun will not reach it. Easily raised from seed. Height 9 in.

ISOLOMA MULTIFLORA

Produces quantities of large, fiery-red flowers from October to April, grows from 12 to 18 in. high, the foliage is dark green covered with brownish-red hair and very attractive. Requires same culture as Gloxinia but much easier raised as it is not nearly as tender as Gloxinia. In fact it is the easiest raised pot plant and will withstand much neglect.

ICE PLANT

Mesembryanthemum Cristallinum—Suitable for rock work, hanging baskets, etc. Foliage thick, frosted and wax-like. Easily grown from seed sown from March to May. Half hardy annual. Height 6 inches. T. pkt. 10c; oz. 60c.

IMPATIENS SULTANI

Easy to raise from seed and indispensable for window boxes and bedding also as a house plant, as they will bloom profusely even in the darkest shade, where hardly anything else would grow let alone bloom. The flowers are waxy like. Brilliantly colored in all shades of red. Plant 10 inches apart. Height 18 inches.

IMPATIENS HOLSTII—Like the above in habit of growth, flowers beautiful vermilion-red. Cinnabar-scarlet. Height 18 in.

INULA ROYLEANA

One of the finest and most unusual hardy perennials. Flowers 5 in. across daisy-like, rich golden yellow with fine graceful petals appearing from May to August. Easily raised. Not particular as to soil but must be fully exposed to the sun. The seed lays 3-4 weeks before it germinates. Height 2 ft. T. pkt. 20c; ¼ oz. 35c.

Ipomea - Morning Glory

HEAVENLY BLUE—Clark's Early Flowering. A rapid grower, single vine will cover a space of 20 ft. wide and 50 ft. high producing large sky blue flowers five inches across in sheets. Tender annual. T. pkt. 10c; oz. 60c; lb. \$7.00.

CRIMSON RAMBLER—Flowers extra large, ruby-red. T. pkt. 10c; oz. 20c; lb. \$2.00.

SCARLETT O'HARA—Improved strain, the vines having the ability of climbing without assistance. Flowers very large velvety scarlet covering the vine from July until frost. T. pkt. 10c; ½ oz. 20c; oz. \$1.20.

IPOMEA CORNELL—Flowers four inches across, bright rose red with pure white border. Strong grower, rapid climber. T. pkt. 10c; oz. 45c.

MORNING GLORY PEARLY GATES—Flowers 5-6 in. across, satiny white. Effective in combination with red and blue morning glories. T. pkt. 15c; oz. 80c; lb. \$8.00.

GIANT MOONFLOWER, I. NOCTIFLORA

Very showy annual climber, reaching a height of 25 or 30 feet. At night and during dull days the plants are covered with white fragrant flowers 5 to 6 inches in diameter. T. pkt. 10c; oz. 30c; lb. \$3.20.

IPOMEA IMPERIALIS—Japanese Morning Glory. Flowers very large, wide open in an endless range of colors, extremely beautiful. Late flowering and to overcome that sow in March in small pots, set out when danger of frost is past. T. pkt. 10c; oz. 30c; lb. \$3.00.

ISATIS GLAUCA

Perfectly hardy perennial 2 ft. high, producing in June quantities of flowers in panicles, of bright yellow color, useful in arrangement with other flowers. T. pkt. 10c; oz. 45c.

JAPANESE IRIS

Beautiful, large, gracefully formed flowers in many colors and perfectly hardy if planted deep, the crown covered with 2-3 inches of soil and given slight protection over winter. Easily raised from seed. **MIXED**—T. pkt. 15c; oz. \$1.20.

SIBERIAN IRIS—Produces in abundance large, gorgeously colored blooms on long, slender but stiff stalks, during May and June. Unlike the German Iris, Siberian is unexcelled for bouquets and if cut in bud can be shipped and easily handled. Our mixture contains many varieties, the finest like Emperor, Perry's Blue, etc., included. Hardy anywhere if planted deep. Height 3 to 5 ft. T. pkt. 10c; oz. 60c; lb. \$6.00.

IRIS DICHOTOMA—Night blooming Iris, producing lilac-pink flowers in great quantities during August and September. Blooms second year from seed which germinates readily. Hardy perennial. Height 3 ft. T. pkt. 10c; oz. 60c; lb. \$8.00.

JASIONE PERENNIS—Plants of neat compact growth, flowers small scabiosa-like of pretty blue color. Long lived perennial and one of the finest plants for borders and rockeries. Hardy. Height 8 inches. T. pkt. 25c.

KALANCHOE COCCINEA

A succulent plant, ideal for pots, producing highly attractive bright scarlet flowers in great profusion. Easily started from seed.

Start the seed in February or March, grow in the open during summer, place on benches before frost 2-3 plants in a pot to get heavy, bushy growth and a mass of bloom, January to April. Use light soil mixed heavily with peat. Plenty of air and a night temperature of 55 deg. is required.



Kochia

KOCHIA—SUMMER CYPRESS

An annual forming a close dense plant, about 30 inches high. Used for temporary hedge or in groups. Plant 18 inches apart. A bad weed if allowed to go to seed. T. pkt. 5c; oz. 15c; lb. \$1.00.

JERUSALEM CHERRY—See Solanum Capsicastrum.

LATHYRUS LATIFOLIUS—Everlasting Pea

Hardy perennial climber furnishing high class flowers good for any kind of flower work from June to October. White Pearl is extra large flowered and extra good. **LATHYRUS WHITE PEARL—LATHYRUS PINK BEAUTY—BRIGHT DARK RED—FINEST MIXED**—Any color: T. pkt. 10c; oz. 60c; lb. \$5.00.

JACK IN THE PULPIT

An unusual plant with calla-like bloom, green and purple in color with a large club-shaped spadix over which leans an arching spathe. Valuable to advertise yourself in an original way. Blooms in May and June, placed in a show window will create interest, comment and sales. Easily raised from seed. Sow in rich soil in a shaded bed, pot up late in fall, place under glass in February and in your window when in bloom. Hardy perennial. Height 15 in. 30 seeds 15c; oz. \$1.00.

LAGURUS OVATUS—Hare's Tail Grass

Bears large, egg-shaped satiny heads, suitable either fresh or dried for bouquets. Annual. Height 1 ft.

LANTANA

This is a showy bedding and basket plant of rapid growth, fine for pot culture in the winter or garden decoration in the summer. Verbena-like heads of orange, white, rose and other colored flowers. Tender perennial. Height 1 to 2 feet. Compact growing dwarf hybrids in all colors. T. pkt. 15c; oz. \$1.00; lb. \$12.00.

LAVANDULA—LAVENDER

Perennial, hardy if planted in a well drained spot. Lavender-blue flowers that retain their fragrance even when dried and produced in June and July. Height 1 ft.

LAVANDULA VERA—True Lavender. T. pkt. 15c; oz. \$1.40.

LARKSPUR ROSE KING

Giant Imperial type. Color bright deep rose, florets fully double over 2 inches in diameter with broad wavy edged petals closely spaced. Spikes straight 24 to 28 inches long. Plants extremely upright in habit, early and free blooming. T. pkt. 15c; oz. \$1.00; lb. \$10.00.

LARKSPUR HYACINTH FLOWERED

Produces fine long spikes with few or no laterals. The massive spikes are 18 in. in length and fully 2 in. through. Should be planted close. Under glass space the plants six inches apart across the bench and three inches apart in the rows. Ready three weeks earlier than Tall Stock Flowered kind. Magnificent cut flower. Height, 4 ft. **VIOLET-BLUE, ROSE-PINK, WHITE, LILAC, MIXED.** Either color; T. pkt. 15c; oz. \$1.00.

DIGITALIS will bloom in winter if field clumps are planted under glass late in October, spaced 20 inches apart and carnation temperature applied. Forces easily. Water carefully as no water must touch the center of the plant.

CONSULT the front pages of this catalog. You will find many important novelties listed on those pages.

**Annual Larkspur**

Sow the seed as early in the spring as the ground is in workable condition or still better sow late in November, just before heavy freezing weather sets in. To get a crop of flowers for Decoration Day sow under glass in December and January, grow cool, protect the plants from drafts to avoid mildew and to get the greatest number of spikes cut out the central stalk when the plants are 6 inches tall. Larkspur likes sun and rich soil. Resents fresh manure and transplanting. For best results sow the seed where the plants are to stand, later thinning out the King type to stand 18 inches apart each way, all others foot apart each way. In the greenhouse grow in a temperature as near as possible to 50 degrees.

SOWING LARKSPUR Seed germinates in from 20 to 30 days from date of sowing but only when sown real early in the spring or during winter, under glass, in a cool house. Sown late in the spring or during summer when the weather is hot the seed will lay dormant all summer, but will come up either in the fall or very early the following spring. This means that it is a mistake to sow Larkspur in hot weather. Sown at proper time our seed will "come up" every time.

GIANT IMPERIAL LARKSPUR

Produces extra large, well placed flowers, the plants grow compact, branching out close to the ground. Showy, free flowering type of unsurpassed elegance. Height 4-5 feet.

LILAC KING—Rich lilac, fully double closely spaced florets.

ROSE KING—Bright deep rose.

WHITE KING—Glistening white, huge flowers.

PINK PERFECTION—Early flowering in the same class as White King. Heavy producer, cutting spikes 2 ft. long. Florets 2 in. across of lively light pink, very double and large, perfectly placed on the stem.

BLUE BELL—Mid or light blue.

BLUE SPIRE—Intense Oxford Blue or Violet Blue.

CARMINE KING—Deep carmine rose.

EXQUISITE PINK IMPROVED—Soft pink, shaded salmon.

EXQUISITE ROSE—Bright rose-pink color.

GLITTERS—Scintillating salmon-cerise. The brightest of all larkspurs.

GLORIA IMPROVED—Rich deep salmon rose

LILAC SPIRE—Beautiful shade of lilac.

MISS CALIFORNIA—Rich deep pink on salmon ground.

WHITE SPIRE—Pure white, extra large and double.

ANY OF THE ABOVE—T. pkt. 10c; 1/8 oz. 15c; oz. 80c; lb. \$8.00.

GIANT IMPERIAL LARKSPUR MIXED—T. pkt. 10c; 1/8 oz. 15c; oz. 80c; lb. \$8.00.

DOUBLE STOCK FLOWERED LARKSPUR MIXED. T. pkt. 10c; oz. 50c; lb. \$5.00.



Hardy Lilies

All lilies are easily raised from seed that must be covered very lightly and which can be sown either in the spring or late in summer. The seed germinates readily. Auratum Lily makes no growth above the ground, the first year from seed, however the bulbs begin to form soon after the seed is sown but the leaf growth appears the following spring. All lilies must have perfect drainage, fresh manure must be strictly kept away from all of them. They will be benefited if you add leaf mold to the soil, also by placing the bulbs on cushions of sand but will do well without any help in any good WELL drained garden soil.

LILIUM AMABILE—Hardy rock garden lily blooming in June. Large recurving flowers, brilliant grenadine red dotted chocolate brown. Height 20 in. T. pkt. 15c; 1/8 oz. 40c.

LILIUM AURATUM—Large white flowers with broad bands of golden-yellow.

LILIUM CONCOLOR—One of the best lilies, thrifty and easy to grow. Of upright habit flowers open, fiery scarlet spotted dark red, fine for cutting. Hardy. Height 18 in. Blooms in June-July, likes the sun and a situation protected from strong winds. Also fine for pots. T. pkt. 20c; 1/16 oz. 40c; 1/8 oz. 70c; oz. \$5.00.

LILIUM EARLY QUEEN—Perfectly hardy producing from seed, sown in February, quantities of long trumpet-shaped pure white flowers from August to frost. A sure money maker for the florist. Height 3 ft. T. pkt. 20c; 1/16 oz. 30c; 1/8 oz. 55c; oz. \$4.00.

LILIUM EARLY QUEEN—Furnishes a crop of highly valuable flowers late in summer, from seed sown in February, March and early in April. We got the best results by sowing the seed in the open early in the spring, leaving the plants stand where sown. When we transplanted the bulbs they lived one season only and then said goodbye. When we stored the bulb over winter the bulbs did not keep. Yet this Lily is a good "Queen" if sown where to stand and not transplanted. We find that it is perfectly hardy. Even bulbs that rest on top of the ground absolutely uncovered come through the winter unharmed.

What is said about Lillium Early Queen applies to Lillium Philipinense. Ey Queen is pure white selection from Philipinense.

LILIUM HENBYI—Flowers reflexing apricot yellow in August and September. Floriferous, hardy does well under all conditions. Height 2-6 ft. T. pkt. 20c.

LILIUM JAPONICUM—One of the most attractive in the genus. Blooms 3-5 inches long, white on the inside, pink on the outside, fragrant. Height 2-3 feet. T. pkt. 15c; 1/8 oz. 20c; oz. \$1.40.

LILIUM PHILIPENSE FORMOSANUM

A new lily of refined elegance and neat habit of growth, coming into bloom late in June. The very handsome, long, trumpet-shaped flowers are white inside and reddish over the back of the sepals. Moderately fragrant. Hardy. Height 30 in. T. pkt. 15c; 1/8 oz. 25c; oz. \$1.60; lb. \$16.00.

LILIUM REGALE Easily and almost as inexpensively raised as radishes. T. pkt. 10c; oz. 80c; lb. \$10.00.

SPECIOSUM RUBRUM—Hardy. Large fragrant white flowers shaded pink, spotted brilliant carmine-red, blooming in August and September. Height 3 ft.

LILIUM RUBELLUM—Flowers tube shaped of light pink color in June. Can be forced. Requires perfect drainage. Plant 6 in. deep. Height 18 in. Hardy.

ALYSSUM ROSTRATUM is about the most floriferous of all rock plants. Of high value to plant growers.

AGERATUM GIANT OF IOWA—This is a valuable Ageratum because it produces all summer long large heads of beautiful lavender blue in great profusion.

CONSULT the front pages of this catalog. You will find many important novelties listed on those pages.

LILIUM TENUIFOLIUM—Coral Lily. A dwarf growing lily, blooms medium in size, coral red, appearing in great numbers on stalks 2 feet tall. Hardy, easily raised from seed, a fine cut flower and excellent for rockeries. Can be forced. Grown in the open, blooms during May and June. T. pkt. 10c; 1/8 oz. 15c; oz. 80c; lb. \$8.00.

LILIUM TENUIFOLIUM from seed. Sow the seed in the spring, in an open frame, cover the seed very lightly. The seed will be up in less than 30 days. Then cover the frame with lath shades and water as needed. Next spring very early, lift the bulbs of which many will be of salable size namely inch or over in circumference. These you can place in pots or plant in the open about 4 inches deep. Plant the smaller bulbs in the open. The small bulbs will make good sized bulbs the following spring. In the rows space the lilies 5 inches apart.

TENUIFOLIUM GOLDEN GLEAM—New. Flowers rich orange-yellow in May and June. Comes true from seed. Height 2 ft. T. pkt. 20c; 1/16 oz. 35c; 1/8 oz. 60c; oz. \$4.00.

TENUIFOLIUM LILAC QUEEN—Fragrant lilac-rose flowers spotted wine color in May and June. Height 2 ft. (L. Cernuum). T. pkt. 15c.

LILIUM WASHINGTONIANUM—Flowers funnel-shaped, pure white, dotted with purple at the throat. Fragrant. Of striking beauty, one of the finest of all lilies. Hardy. Easily raised from seed. Blooms in June and July. Requires good drainage, bulbs should be planted 5 inches deep and laid sidewise. T. pkt. 25c; 1/16 oz. 35c; 1/8 oz. 65c; oz. \$4.00.

THE SEED of most lilies sprouts readily (Tenuifolium, Regale, Philipinense) seed of some others lays long before sprouting. Never discard a sowing before 12 months from date of sowing. It takes that long for some lilies to "come up" (Auratum, Washingtonianum).

LINUM—FLAX

PERENNE—Perennial, bearing on numerous branches bright blue dainty flowers in June and July. Height 30 in. Blooms first year from seed. T. pkt. 10c; oz. 45c; lb. \$3.60.

RUBRUM GRFL—Large flowered Scarlet Flax. A neat annual plant with brilliant flowers and dainty foliage. Blooms from June to October from seed sown in April and will bloom in May from seed sown in February-March and because it can be brought into bloom in May it is a valuable item for spring sales. Height 15 in. T. pkt. 10c; oz. 45c; lb. \$4.00.

LINUM CLOTH OF GOLD Linum Flavum Compactum Nanum. Of exceptional value for rockeries and low borders. Plants of neat compact growth, foliage deep shiny green covered with glowing golden yellow bloom from May to September. Then if the plants are cut down they produce another crop of flowers in the fall. Hardy perennial. Height 6 in. T. pkt. 30c.

LINARIA BELVEDERE HYBRIDS

Try this Linaria. It is a real flower, very beautiful, of elegant shape, the colors which are many even more lustrous and clear than those of Nemesia. Blooms in May, June and July, therefore valuable for spring sales. Also first class cut flower. Easily raised. Annual. Height 15 in. T. pkt. 15c; 1/8 oz. 35c.

LINARIA FAIRY BOQUET—Very compact plants, bearing snap-dragon-like flowers in many delicate and attractive colors in abundance from June to October or earlier if sown early. Fine bedding and pot plant. Annual. Height 10 in. T. pkt. 15c; 1/16 oz. 30c.

Annual Linarias started from seed from August to January will bloom from February to the end of June. Grow in flats 2x2 in., temperature 45 degrees.

PERENNIAL LINARIA

LINARIA CYMBALARIA—Kenilworth Ivy. Hardy perennial trailing plant, excellent for hanging baskets, window boxes, pots and rock work. Flowers lavender and purple. Will stand good deal of shade. T. pkt. 15c.

LINARIA MACEDONICA—Robust perennial, bearing long spikes of beautiful lemon yellow snapdragon-like flowers from May to August, excellent for cutting. Of easiest culture, blooming first year from seed and doing well in any kind of soil and exposure. Height 3 ft. T. pkt. 10c; 1/8 oz. 40c; oz. \$3.00.

ALPINA HYBRIDA—This hardy perennial Linaria is extremely beautiful, an ideal rock and bedding plant. Flowers produced from May to October snapdragon-like in many bright colors. Height 6 in.

LEPTOSIPHON FRENCH HYBRIDS

in bloom from May to November. The plants are globe-shaped, covered with charmingly beautiful flowers in many colors. A first class border and pot plant and fine for rockeries. Annual. Height 6 in. T. pkt. 15c; 1/16 oz. 20c.

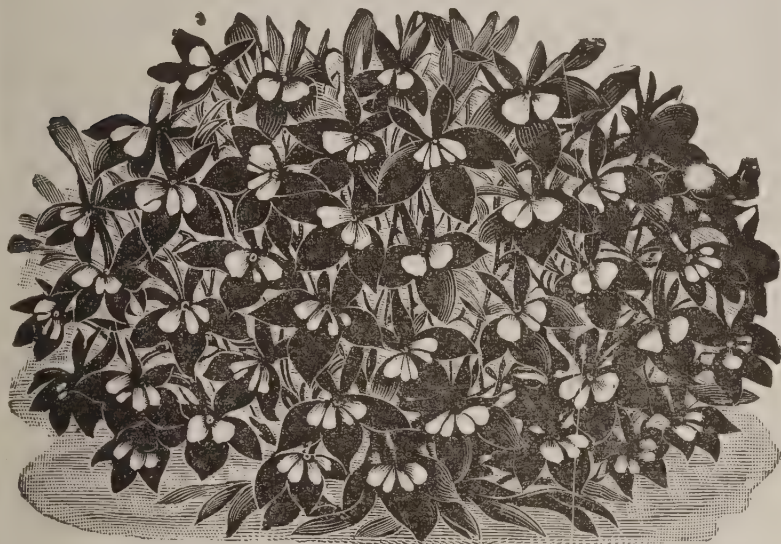
LEWISIA HOWELLI

A rare and admirable plant for the rockery. Produces an abundance of star-shaped flowers, color a blend of pink and apricot, over a long period of time. Robust grower, easy to grow from seed, does well in any decent soil if well drained, and loves the sun. T. pkt. 25c. **LEWISIA REDIVIVA**—Hardy perennial rock plant with succulent leaves and waxy white and pink flowers in shape like a water lily about 2 in. across. Must have sharp drainage and full sun. Height 4 in. T. pkt. 25c.

Lobelia

will produce blooming plants in April or May. Sown outdoors in May will bloom in July and then till frost. Requires good soil and plenty of water. Where the summers are not too hot and dry they are bright and in full bloom at all times. The perennial *Cardinalis* variety must be planted in half shaded, cool and moist spot in soil containing sand and leaf mould. Pinch several times.

The annual varieties are used for borders, edgings, in design work and as pot plants, for which purpose 3 to 5 plants are placed in each 3-inch pot. Of easiest culture. February sown seed



BEDDING QUEEN—Dark blue with clear defined white eye, one of the best for bedding and ribboning. Height 4 in. T. pkt. 10c; 1/16 oz. 25c.

LOBELIA RED QUEEN—Of compact erect growth, foliage dark green, resembling in manner of growth the *Crystal Palace Compacta* variety. The flowers rich velvety red, a beauty indeed. Height 10 in. T. pkt. 10c; 1/16 oz. 25c.

CRYSTAL PALACE COMPACTA—The finest for bedding of compact, erect growth. Flowers deep blue, foliage dark. T. pkt. 10c; 1/16 oz. 25c; oz. \$2.40.

GRACILIS—Light blue. Height 10 in. T. pkt. 10c; 1/8 oz. 25c.

ARNARD'S PERPETUAL—Deep blue with large, white eye, very fine variety. Height 8 in. T. pkt. 10c; 1/16 oz. 25c.

LOBELIA RAMOSA—Beautiful and highly attractive variety of robust, upright growth, a heat and drought resisting sort, bearing light, deep gentian-blue flowers of much larger size than is the rule. High class for large beds, for borders and first rate pot plant. Different from the general run of *Lobelias*, unaffected by heat or extreme sun's glare, should prove of value in all parts of the country. Height 16 in. T. pkt. 10c; 1/16 oz. 25c.

BLUE GOWN—Plants compact, flowers clear deep blue without eye. Height 4 in. T. pkt. 15c; 1/8 oz. 35c; oz. \$2.50.

LOBELIA BLUE STONE—Of compact growth, flowers clear gentian blue without eye. One of the finest bedding *lobelias*. New. Height 4 in. T. pkt. 10c; 1/16 oz. 35c.

HYBRIDA PENDULA SAPPHIRE—Beautiful variety for hanging baskets with large blue flowers and large white eye. T. pkt. 10c; 1/16 oz. 35c.

LOBELIA CARDINALIS—(*Cardinal Flower*). A native perennial forming long spikes thickly set with bright crimson flowers. Height 3 feet. T. pkt. 15c; 1/8 oz. 50c; oz. \$3.20.

LUNARIA BIENNIS

KERMESINA—Of all *Lunarias* this is the most showy. The seed pods which are round and transparent showing the seeds inside and the size of a 25 cent piece, are used in dry bouquets. They are very ornamental. Sow the seed in August and September, give protection over winter and your plants will bloom in May to July and bear pods in great abundance. Height 4 ft.

Plant three seeds in each hill, cover the seed with an inch of soil, thin out when the plants are in the second leaf leaving one strong plant per hill. Do not plant closer than 3x3 feet so that your plants do not get tangled together. T. pkt. 10c; oz. 60c; lb. \$6.00.

LYTHRUM ROSEUM SUPERBUM

LYTHRUM SUPERBUM—(*Rose loose-strife*). Hardy perennial good massing. Produces masses of lustrous rosy carmine flowers, high class for bouquets from June to September. Height 3 feet. Space 2 feet apart. T. pkt. 15c; oz. 80c.

MAURANDIA—CLIMBING SNAPDRAGON

Lophospermum Scandens. A beautiful annual climber with clean, dark green, dense foliage. Sow the seed in March and plant outdoors in May. The flowers resemble those of snapdragons in shape and are of many colors and shadings from June to October. Fine for baskets. The seed we offer is of the largest flowered varieties in mixture. Height 10 feet. T. pkt. 15c.

Lupinus

Easily raised from seed, doing well in any soil save soils containing excess of lime for which lupins have no liking. Cover the seed only about half inch and space the plants 15 inches apart. In the greenhouse sow from September to February, shift as needed, grow them cool, 48 to 50 deg. and allow to bloom in 4 in. pots. In solid beds have them 14 inches apart. For forcing use the *HARTWEGI* annual variety. Easily forced into bloom in 8 weeks and easily saleable as it is, an elegant cut flower. All lupins bloom outdoors from May till almost frost.

Lupins are not easy to transplant and they resent excessive moisture.



LUPINUS NEW HYBRIDS

A splendid hardy perennial, producing masses of gorgeous blooms in May and June on strong, stiff stems, 3 feet in length, mostly in pink, blue, lavender and white. Requires somewhat sandy soil for best results. First rate cut flower, fully as valuable as gladioli or delphinium. T. pkt. 15c; oz. 80c; lb. \$8.00.

LUPINUS POLYPHYLLUS—Hardy Lupines

LUPINUS POL. DARK BLUE, LUPINUS POL. WHITE—Both colors: T. pkt. 15c; oz. 80c; lb. \$8.00.

SMILING BEAUTY—Of most lovely, lustrous pink color. A robust grower. Height 3 ft. T. pkt. 20c; 1/8 oz. 45c; oz. \$3.00.

MAUVE BEAUTY—Soft lavender shaded with deep rose, a most charming color. T. pkt. 15c; 1/8 oz. 25c; oz. \$1.80.

LUPINUS POL. ROSEUS—A fine variety with sweetly scented light and dark rose flowers on long spikes. Height 4 ft. T. pkt. 10c; 1/8 oz. 15c; oz. 80c.

SALMON BEAUTY—Tender salmon-pink, fine for cutting. T. pkt. 15c; 1/8 oz. 25c; oz. \$1.80.

CRIMSON BEAUTY—Bright crimson in bold spikes. T. pkt. 10c; 1/8 oz. 15c; oz. 80c.

RUSSELL LUPINS MIXED This mixture contains many colors not seen in perennial lupins before, the spikes are of a remarkable uniformity and superior quality. T. pkt. 15c; oz. \$1.40; lb. \$16.00.

ANNUAL LUPINES

LUPINUS HARTWEGI GIANTS—Spikes and individual flowers very large plants branching from close to the ground 3-4 feet tall producing 4-6 spikes per plant in blue, pink and white. Annual. **DARK**

BLUE, LIGHT BLUE, ROSY PURPLE, WHITE, MIXED. Price the same for all: T. pkt. 10c; oz. 60c.

LUPINUS SULPHUREUS SUPERBUS—Beautiful spikes of bright sulphur yellow. An exquisite cut flower. Annual. Height 30 in.

LUPINUS TEXENSIS Texas Blue Bonnet. Annual, flowers deep violet blue, white center and VERY beautiful. Planted once, will seed itself and keep on coming year after year. Height 1 ft. T. pkt. 10c; oz. 45c; lb. \$4.00.

MESEMBRYANTHEMUM—(*Ice Plant*). T. pkt. 10c; oz. 60c.

LEUCORYNE IXIODES

Leucoryne Ixioides Odorata or Glory of the Sun is a bulbous plant producing on wiry stalks 18 inches tall, large heads of fragrant blue flowers with white centers, from February to May. Easily raised. The seed germinates readily, producing flowering size bulbs 2 years from date of sowing. Culture same as for Freesia. T. pkt. 50c; 10 pkts. \$4.00.

MATTHIOLA BICORNIS

Evening Scented Stock. Highly priced for its delightful perfume that is strongly felt in the evening and early morning. Flowers deep lilac from July to September. Sow early in the spring in a sunny position in any kind of soil. Height 18 inches. Annual. T. pkt. 10c; oz. 80c.

Lychnis

A showy hardy perennial in bloom from July to September, fine for beds, the border, as a rock plant, etc. Very much worth growing. Every variety listed by us is worthy of trial.

CHALCEDONICA GRANDIFLORA—More robust in growth than Chalcedonica, flowers extra large, flaming scarlet. Hardy perennial. Height 2 ft. T. pkt. 15c; 1/8 oz. 25c.

LYCHNIS CHALCEDONICA SALMON QUEEN—Light salmon pink, beautiful and perfectly hardy. Height 2 feet. T. pkt. 15c.

LYCHNIS HAAGEANA HYBRIDA—Finest of the Lychnis family. Colors varied. Height 1 foot. T. pkt. 20c.

LYCHNIS VISCARIA SPLENDENS (German Catchfly)—Fine hardy border plant, producing in profusion double brilliant red flowers in June and July. Height 1 foot. T. pkt. 10c.

LYCHNIS ARKWRIGHTII—New. Produces an abundance of large brilliantly colored flowers during summer in scarlet and pink shades. Hardy perennial, height 30 inches. T. pkt.

LYCHNIS ALPINA Hardy perennial rock plant, neat and compact, bearing brilliant rose pink flowers in April and May. Height 5 in. T. pkt. 25c; 1/32 oz. 80c.

LYCHNIS LAGASCAE Hardy perennial miniature Alpine, in bloom during May and June. Flowers carmine-rose of unusual brilliancy. Plants of evergreen habit. Very choice.

LYCHNIS FORRESTII A fine, new hardy perennial with tufted grass-like foliage, producing quantities of showy panicles of flowers of bright pink, crimson and white on stout stalks 15 in. high from June to September. An elegant flower, valuable for cutting as a border plant and for rock gardens. Will withstand an incredible amount of drought. Height 2 ft. T. pkt. 40c.

MATRICARIA—FEVERFEW

Perennial treated as an annual because not hardy in the North. The neat graceful flowers useful in most any kind of flower work, are produced from June to November, from seed started early in the spring.

Sow in March in shallow boxes (2 inches deep). When the plants are large enough to handle, transplant into another box and set out in the open in May.

MATRICARIA EXIMIA GOLDEN BALL—Of compact habit, suitable for edging, with very striking double yellow flowers. Height 8 in. T. pkt. 10c; oz. \$1.00; lb. \$14.00; 1/8 oz. 20c.

MATRICARIA CAPENSIS ALBA PLENA—Free-flowering plants of bushy habit, bearing quantities of snow-white double flowers in dense clusters almost covering the plant. Fine for pot culture and for cutting. Tender perennial, blooming the first year from seed. Height 2 ft. T. pkt. 10c; oz. 60c; lb. \$8.00.

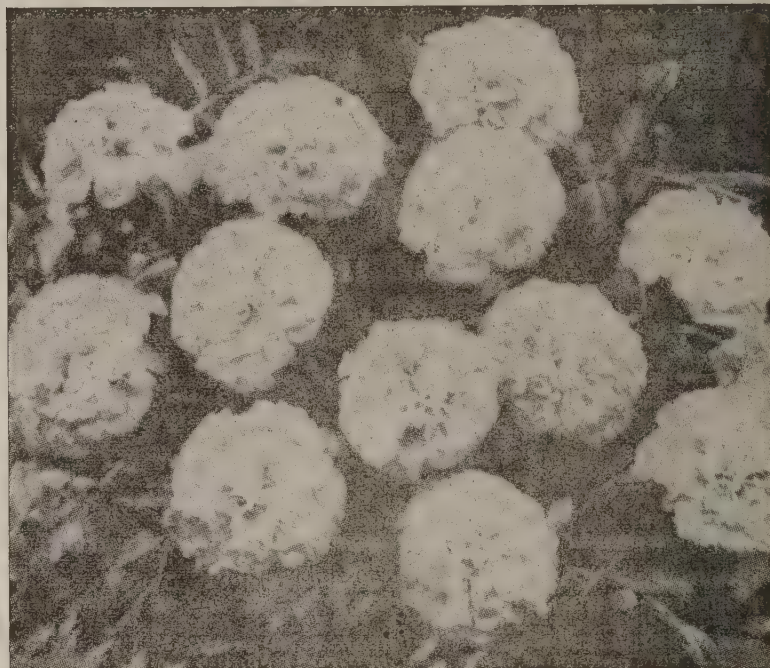
MATRICARIA BALL WHITE—Extra selected stock. Plants of compact growth covered with fully double flowers with quilled petals. Blooms early. Height 1 foot. T. pkt. 15c; 1/8 oz. 30c; oz. \$4.00.

MARIGOLD HARMONY

Dwarf French type. Flowers double, cushion-like in the center which is of golden orange in color, surrounded with a double row of petals of redish brown. The two colors produce a brilliant and harmonious contrast. Blooms early and profusely until frost. Plants compact, foot high. One of the finest of all marigolds. T. pkt. 10c; 1/8 oz. 15c; oz. 80c; lb. \$6.00.

WINTER HARMONY—Improved strain. Flowers almost 3 inches across with golden orange centers and reddish brown guard petals on long stems coming 100% double. Plants of neat compact growth foot high. T. pkt. 20c; 1/4 oz. 40c.

MARIGOLD YELLOW PIGMY. Plants only 6-8 in. tall, flowers double, 1 1/4 inches across of bright lemon yellow, produced in quantity from early spring until frost. Fine for pots, edgings and bedding. T. pkt. 10c; oz. \$1.00; lb. \$10.00.



Marigold—Tagetes

First class cut flowers, the dwarf varieties are valuable bedding plants. Plant foot apart, give rich soil from start to finish, with full exposure to the sun. The dwarf sorts grow a foot high, the tall reach 2 1/2 feet. They bloom from July to frost. Sow the seed in March indoors or in May outdoors.

Marigold is one of the best paying flowers. Thrives in almost any kind of soil and reaches the peak of its beauty in the very warmest weather even in dry season. Shipped long distances, stays bright and crisp for days after other flowers would have wilted. A first class cut flower and wonderful in sprays and wreaths.

TALL GUINEA GOLD—Flowers all double, resembling a carnation in form, brilliant orange. Less pungent than is the rule.

TALL ALL DOUBLE ORANGE—Flowers 4 inches across.

TALL ALL DOUBLE LEMON—Very double, sulphur yellow.

TALL DOUBLE ELDORADO—Flowers very large and double, beautifully quilled, deep yellow.

TALL DOUBLE ORANGE PRINCE—Largest ball shaped well formed heads, glowing orange, early flowering, extra special strain.

TALL DOUBLE LEMON QUEEN—Very large, extremely double, sulphur yellow.

TALL DOUBLE MIXED—Large flowered, colors light and dark yellow.

DWARF DOUBLE AURORA—Very double and large, pale yellow, flushed red, beautiful.

DWARF DOUBLE VULCAN—Shining purple scarlet, streaked with primrose yellow, very striking new variety.

DWARF DOUBLE DARK BROWN—Very double, fine for bedding.

DWARF DOUBLE GOLDEN BALI—Large flowered Monarch strain.

DWARF DOUBLE MIXED.

MARIGOLD DOUBLE DWARF FRENCH—MONARCH STRAIN—A very compact strain, large double flowers, wide range of colors.

PRICE: Any Marigold listed above: T. pkt. 10c; oz. 60c; lb. \$6.00.

MARIGOLD SUNLIGHT

New type Marigold and the color is new too, namely of striking deep orange-red. Flowers extremely double, ball-shaped, six inches across. Height 3 ft. T. pkt. 10c; oz. 80c.

MARIGOLD SUNSET GIANTS

Flowers of immense size, 5 to 7 inches across, fully double, resembling a chrysanthemum in formation of bloom. The flowers are fragrant in many shades of yellow from primrose to deep orange. First rate cut flower. Very free blooming. Comes about 80% true from seed. Height 4 to 5 feet. T. pkt. 10c; 1/8 oz. 15c; oz. 90c.

MARIGOLD BUTTERBALL—Flowers 2 1/2 inches across with crested centers surrounded by several rows of broad velvety petals. Color lovely soft butter-yellow shade. Plants compact, only 6 to 8 inches tall, covered with bloom from late in June till October. T. pkt. 10c; oz. 60c.

MARIGOLD TOM THUMB GOLDEN CROWN—Very dwarf only 10 inches tall, flowers large and double, carnation type, brilliant orange freely produced. T. pkt. 10c; 1/8 oz. 20c; oz. \$1.20.

Liatris—Gay Feather

To produce beautiful, shapely spikes of bloom must be grown in poor soil or if your soil is rich the plants must be crowded so that they will suffer from lack of moisture and nourishment. Given care and rich deep soil they grow too rank.

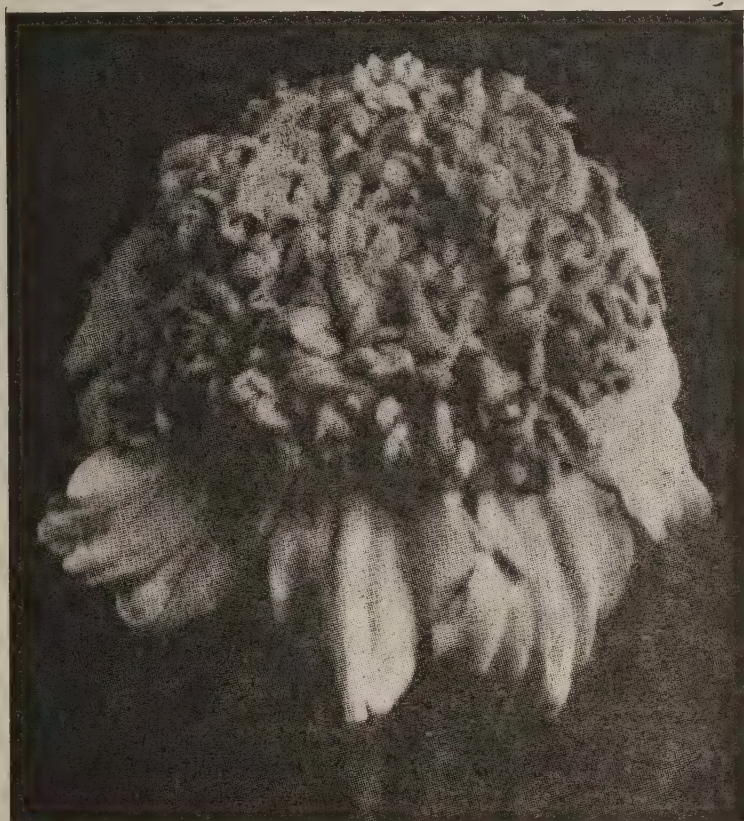
LIATRIS CALLILEPIS—Same as *Pycnostachya*, but 3 weeks earlier. Height 3 ft. T. pkt. 10c; $\frac{1}{8}$ oz. 30c; oz. \$2.00.

LIATRIS PYCNOSTACHYA—Every flower grower will gain by growing this showy, hardy perennial. Blooms during July and August, produces elegant purple flowers, spikes foot long or over. High class cut flower either fresh or dried. Height 5 ft. T. pkt. 10c; $\frac{1}{8}$ oz. 15c; 1 oz. \$1.00; lb. \$14.00.

Strong one year old bulbs. Dozen for 60c, prepaid. Un-prepaid: 100 for \$4.50.

LIATRIS SCARIOSA—Spikes of purple flowers foot long on stalks 2 feet tall in August and September. T. pkt. 10c; $\frac{1}{8}$ oz. 35c; oz. \$2.00.

LIATRIS HYBRIDS—Plants 4 to 5 ft. high with enormous individual florets in great spikes. In bloom from August to November. T. pkt. 20c; $\frac{1}{8}$ oz. 30c.



MARIGOLD CROWN OF GOLD Delightfully different from other Marigolds, an entirely new type of flower—a chrysanthemum-like top or crown of incurved petals surrounded by a collar of big and broad petals. Flowers $2\frac{1}{2}$ inches across on long stems, color brilliant golden orange, possessing a delicate very agreeable fragrance. Plants two feet tall entirely free from any odor, extremely floriferous, giving the plant in full bloom the appearance of a large orange top with a green base. Crown of Gold is a flower of extraordinary value for cutting. T. pkt. 15c; oz. 80c.

MARIGOLD DWARF ALL DOUBLE ROYAL SCOT—Broad-petaled French carnation type. Golden yellow, evenly marked with mahogany brown stripes. Plant compact, foot high. T. pkt. 10c; $\frac{1}{8}$ oz. 20c; oz. \$1.20.

MIMOSA PUDICA—SENSITIVE PLANT

A curiosity among flowers; the fern-like leaves closing when touched and a clump of plants are quite a sight when hit by a handful of sand. They close their leaves instantly. Produce a whisper-like noise. A perennial treated as an annual. Flowers purple in elongated heads. Easy to grow. Seedlings should be transferred to small pots, later shifted with care to larger pots. Temperature 50 deg. This plant could be easily made popular as a house plant. Height 1 to 2 ft. T. pkt. 20c.

LIEB'S MARIGOLD Sow in September up to December to get a crop of flowers from October to May. Flowers mahogany brown with golden yellow crested centers double and sweet scented, three inches across. Space the plants 10x10 in. and pinch back once. Height 3 ft. T. pkt. 20c; 1 oz. \$1.40.

MARIGOLD YELLOW SUPREME Carnation flowered tall double marigold of light lemon yellow with flowers of medium size. Height 30 in. Pkt. 10c; oz. 80c.

MARIGOLD EARLY SUNSHINE

Hard to beat for earliness, as an immense flower producer and for its extreme neatness and perfect shape of the plants which are a huge perfectly arranged bouquet from June to frost. To our way of thinking this is the finest and most valuable marigold for flower work and garden decoration. The whole plant is fragrant flowers $2\frac{1}{2}$ in. across of bright lemon-yellow color. Comes 100% double. Height 30 in. T. pkt. 10c; $\frac{1}{8}$ oz. 20c; oz. \$1.40.

OSTROWSKYA MAGNIFICA

Few hardy perennials are as showy as *Ostrowskya*. Nothing new, yet still rare. If you will undertake to grow *Ostrowskya* you will wait for blooming plants 3 years from date of sowing. If you will wait, you will be richly repaid. Your plants will be a delight to you and in great demand by flower lovers when seen with their pale blue bell-shaped flowers that are 4-5 inches across, in clusters of 3 to 6 at the top of each stem. Full grown plant throws 6-10 flowering stems and is a sight long remembered. Easy to grow. Demands well drained deeply worked soil and a cover of coarse litter after blooming which is in August. When through blooming nothing is left of the plant above the ground, it needs covering to keep it dormant during rainy fall weather. It is perfectly hardy and enjoys our dry and hot climate. Height 4-5 ft.

CULTURE—Sow in flats filled with one half well rotted screened sod soil and one half coarse sand. Press the seed to the soil and cover lightly with clean sand. The seed lays for 2 to 4 months before it germinates. When the seedlings are large enough to handle place them singly in small pots. Plant in the open late in the spring in deeply worked ground that is perfectly drained. Perfect drainage is very important. The tops of *Ostrowskya* die down after through blooming and it is time to cover the plants with boards or pine boughs and the cover must be left on the plants till late in the spring. The covering excludes moisture and keeps the plants dormant preventing injury from late frosts to the tender shoots of the plant which would appear early if left uncovered.

WE CALL

Your special attention to the following items:

Antirrhinum Pumilum
Antirrhinum Supreme
Gloxinia Blue Wonder
Delphinium Cambridge
Matricaria Ball
Pentstemon Grandiflorus Mixed
Petunia Glamour
Petunia Velvet Ball
Petunia Mars
Scabiosa Speciosa
Primula Giant Malacoides

FLOWERING LIVE STONES

MESEMBRIANTHEMUM L. MUNDTII—A succulent plant, stemless, leafless, closely resembling a small rock in shape. Yet it is a plant very much alive, growing steadily, finally blooming and greatly admired.

CULTURE: Same as directed for Cactus.

MESEMBRYANTHEMUM CRINIFOLIUM

Livingston's Daisy. Highly attractive annual producing daisy-like flowers two inches across, in every imaginable color, from May to October. Valuable for dry sunny places, the rock garden and as a pot plant. Plants dwarf, spreading to about a foot in diameter, covered with blooms. T. pkt. 25c.

MIGNONETTE—RESEDA

CULTURE—Sow the seed outdoors in April in a half shaded moist spot. A place where they will receive the morning sun is the best. For winter and spring blooming sow the seed from August to February in pots, give all the light possible and keep in a temperature of 40 to 45 degrees.

Mignonette does not stand transplanting very well, therefore sow 5 to 8 seeds direct in a 2½ inch pot, later pull out the weak plants and leave 1 or 2 of the strongest. One plant to a pot will produce extra large spikes if pinched back only once. If you leave two plants to a pot and pinch back when about 2 inches high to make them branch out again pinching the branches until there are 5 to 8 strong shoots, you will get many smaller spikes.

To produce extra long spikes keep the plants in a temperature of 36 to 40 degrees at night. Disbud all flower spikes as SOON AS THEY APPEAR allowing only the center flower to bloom. Keep the plants erect by means of wire or other supports to avoid crooked stems.

Mignonette requires rich soil, half compost mixed with half partly decayed manure gives the best results. Keep the plants tied to stakes and place them in the benches foot apart.

NEW YORK MARKET—A strain which cannot be surpassed for the greenhouse, producing immense flower spikes, was saved for us by one of the largest growers of Mignonette for the New York Market. Height 2-3 ft. T. pkt. 20c; 1/16 oz. 35c; ½ oz. 55c; oz. \$4.00.

SWEET SCENTED—This is the old original type with small spikes but with powerful and lasting fragrance. Height 1 ft. T. pkt. 5c; oz. 10c; lb. 90c; 10 lbs. \$8.50.

MACHET—Ever-blooming, the flowers last till late autumn. Highly fragrant. Our seed is the finest strain from a noted German specialist. Height 1 ft. T. pkt. 10c; oz. 60c; lb. \$8.00.

MIMULUS TIGRINUS

Half hardy perennial treated as an annual. First class for pots and bedding. Sown in February produces bloom in May and the plants stay covered with magnificent bloom all summer. Sown in August and September blooms in winter. The flowers are something like snapdragons in shape, very large in many colors spotted and blotched in a marvelous fashion rivaling in beauty the Calceolaria. Of easiest culture, doing well almost in any soil or position. The seed we offer is the best giant flowered Prize Strain obtainable. Height 12 in. T. pkt. 15c; 1/32 oz. 35c.

MIMULUS MOSCHATUS (Musk Plant)—Half hardy perennial, fine for pots and to grow in moist and shady situations. Will do well under cool greenhouse benches. Foliage fragrant flowers pale yellow from May to October. Hardy if protected and if grown in rich heavy soil. Height 12 in. T. pkt. 15c; 1/64 oz. 25c.

MINA LOBATA Start in flats Feb.-Mch., use half sand and leaf mould, pot up singly, plant outdoors when danger of frost is past in rich ground and full sun. The flowers are first red, changing to orange and finally to white. Foliage clean, neat, very dense. An out of ordinary very choice climber. Tender annual. Height 20 ft. T. pkt. 15c.

MONARDA CAMBRIDGE SCARLET

Produces in July and August brilliant crimson-scarlet, very conspicuous flowers. Foliage fragrant. Perfectly hardy, thriving in any soil or position. Height 30 in. T. pkt. 20c; 1000 seeds 70c.

EUPHORBIA MYRSINITES—We used to be bothered with moles in one of our gardens. We planted in those spots where moles worked a few plants of E. Myrsinites. The moles moved out. The plants of E. Myrsinites drove the moles to another part of our gardens. We planted more Euphorbia. The moles left. We advise planting E. Myrsinites if moles are in your garden.

OUR TRADE PACKETS

are double the quantity of retail packets. Our packets are well filled with fresh seed of strong germination, strictly true to name. When it comes to quality our seeds are 100 per cent. You will get no junk from us.



Forget-Me-Not—Ruth Fisher

Myosotis—FORGET-ME-NOT

Of easiest culture. For best results sow the seed of Blue Basket, Indigo Blue, Pink Beauty, Royal Blue, and Victoria in July or August, transplanting into cold frames or on benches if intended for winter blooming. Your plants will be in full bloom in May. Blue Bird, Christmas Bouquet, Marga Sacher, Ruth Fischer are treated same way or can be started under glass early (February-March) to have blooming plants for spring sales. Experienced growers treat these varieties as annuals. Dissitiflora and Palustris do equally well no matter when you sow the seed and although true hardy perennials should be protected over winter not from cold but to keep the plants dormant. Uncover when danger of late spring frosts is past, not before.

MYOSOTIS VICTORIA—Produces heads of large, clear azure-blue flowers. Plants bushy and compact. Height 8 in. T.

MYOSOTIS DISSITIFLORA—One of the best of all myosotis. Of compact habit with mossy dark green foliage, about which are carried on sturdy stems large clusters of fine azure-blue flowers. Perfectly hardy, forces easily. Height 12 in.

PALUSTRIS SEMPERFLORENS—Everblooming swamp forget-me-not. Blooms all summer. A very good variety. Height 10 in. T. pkt. 25c.

MYOSOTIS BLUE BIRD—Winter blooming sort of vigorous growth, very floriferous. Dark blue, fine cut flower. Height 1 ft. T. pkt. 15c; 1/16 oz. 30c; ½ oz. 55c; oz. \$4.00.

RUTH FISHER—Very fine. Of compact habit with glossy dark green foliage, the sturdy flower stems bearing large clusters of lovely bright blue flowers ½ inch across. Height 10 in.

ROYAL BLUE Grows a foot high and bears flowers in long sprays of the deepest blue. Fine for cutting. T. pkt. 25c.

MYOSOTIS CHRISTMAS BOUQUET Started in February up to early in April, produces a wealth of dark blue flowers on long stalks late in May and for a long time afterwards. Sown in June to early in August blooms for Christmas. Height 1 ft. T. pkt. 20c.

MYOSOTIS BLUE BASKET Produces such a mass of bloom as no other Myosotis ever produced, of exceptionally bright dark blue color. Plants of neat, compact growth. Height 1 ft. T. pkt. 20c.

WE FILL SEED ORDERS THE SAME DAY AS RECEIVED

MYOSOTIS BLUE PEARL

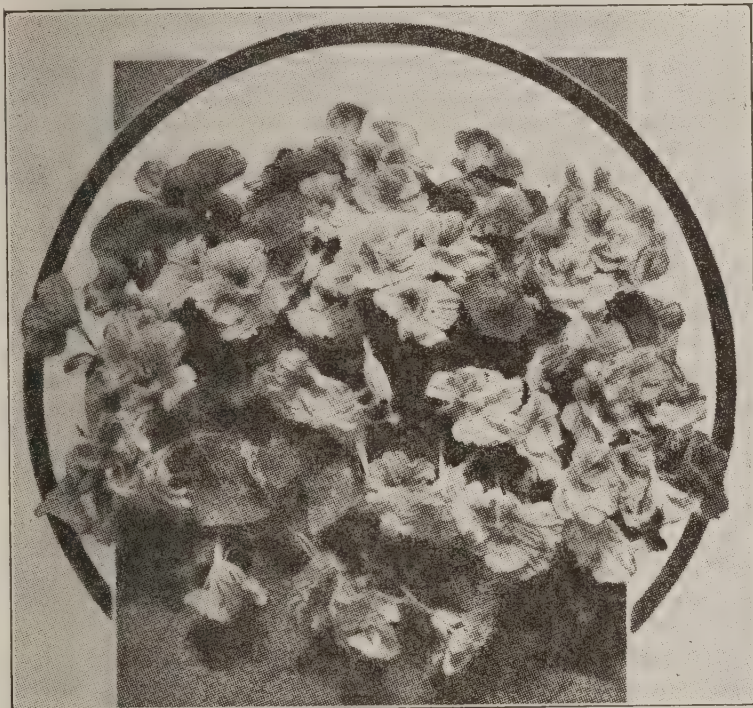
A fine myosotis for pots, bedding, carpeting, edging or cutting. The plants grow 8 inches tall, are compact, perfectly globular and in bloom from 8 to 10 weeks after sowing. The flowers are medium to large in size, sky-blue. Height 8 in. T. pkt. 15c; $\frac{1}{8}$ oz. 40c; oz. \$3.00.

STRICTA INDIGO BLUE—Blossoms in April and May if started in June-August. Plants dwarf, compact covered with bloom of attractive blue. One of the best selling Myosotis.

MYOSOTIS PINK BEAUTY Of upright growth, flowers bright rosy-pink. Pink being an unusual color in Forget-Me-Nots and the fact that Pink Beauty is in bloom during May and June, should make Pink Beauty Myosotis a readily saleable plant. Height 1 ft. T. pkt. 20c; $\frac{1}{8}$ oz. 35c.

MIXED FORGET-ME-NOT—T. pkt. 10c; oz. 45c; lb. \$5.75.

MOONFLOWER—See Ipomea Noctiflora.

**Nasturtium**

Tender annual. Plant outdoors in April and May.

DWARF NASTURTIIUM

FINEST MIXED—This is a high class mixture of dark leaved varieties including every color known in Nasturtium. T. pkt. 10c; oz. 20c; lb. \$2.00, postpaid.

NASTURTIIUM BEAUTY OF MALVERN

The plants are compact and bushy and produce twice as many flowers as other varieties. Flowers large, single, on long stems well above the foliage, color bright orange scarlet. Winter bloomer.

NASTURTIIUM DOUBLE GIANTS—Compact only 8-10 inches tall, flowers double and semi-double, three inches across, in an endless range of bright colors on long stiff stems, excellent for cutting and bedding. T. pkt. 10c; oz. 20c; lb. \$2.00.

NASTURTIIUM GOLDEN GLOBE—Well formed double, deep golden yellow sweet scented flowers on uniformly dwarf and compact plants. Very free flowering. T. pkt. 10c; oz. 20c; lb. \$2.00.

NASTURTIIUM SCARLET GLEAM

Flowers twice the size of ordinary Nasturtium with inner petals overlapping toward the center giving the flower an appearance of doubleness. Color dazzling scarlet. T. pkt. 10c; oz. 20c; lb. \$2.00.

NASTURTIIUM GOLDEN GLEAM

Large double, fragrant golden-yellow flowers on long stiff stems freely produced. When forced, blooms in winter and grows 6 to 8 feet tall. T. pkt. 10c; oz. 20c; lb. \$2.00.

**TALL NASTURTIIUM
GLORIUS GLEAM HYBRIDS**

This climbing Nasturtium produces practically 100% double flowers (semi-double) well above the foliage in an endless variety of colors. Flowers extra large on long stems. For a maximum crop of flowers in mid-winter, grow on raised beds, never on open ground. (Temperature 45-50 deg.). T. pkt. 10c; oz. 20c; lb. \$2.40.

NAEGELIA

(Naegelia Zebrina Discolor.) A beauty which will create a near sensation among flower lovers when your plants will be in bloom. It is easily raised from seed blooming six months after sowing. The flowers are bell-shaped, resembling gloxinia, about two inches across, flaming red on the outside and deep golden yellow inside, attractively spotted mahogany brown. The shape of the plant resembles a pyramid covered with bloom and there are as many as 100 flowers on a single plant at a time. The foliage is thick, velvety, very dark crimson, a great ornament in itself. The whole plant is immensely effective. Grow Naegelia. We assure you that your plants will make a hit when in bloom. Culture same as for Gloxinia. Height 8 in.

Nemesia

The flowers of Nemesia are exceptionally bright colored, plants in bloom sell at sight. Easily raised, doing well in any good garden soil. If wanted for Christmas sow in mid-August, if for Mothers' Day and for spring sales sow in January or early in February. Sown outdoors when danger of frost is past they bloom from June to September. Space the plants 6 x 6 in. Tender annual. Fine for beds, pots, as well as for cutting.

Nemesia is apt to damp off easily. Sown outdoors late in April or early in May, there is seldom any loss from damping off. The seed germinates in two weeks from date of sowing, should be covered lightly and the sowing watered carefully.

NEMESIA COMPACTA GRANDIFLORA

Plants 8 inches high, excellent for edgings and for pots. **FIRE KING.** Brilliant scarlet. **BLUE GEM.** Pretty Forget-Me-Not blue. **CARMINE KING.** Carmine rose. **ORANGE KING.** Rich orange. **WHITE KING (Edelweiss).** Pure white. **BRIGHTNESS.** Brilliant cherry red, very effective. **COMPACT, MIXED.** Price the same for all. T. pkt. 20c; $\frac{1}{16}$ oz. 40c; $\frac{1}{8}$ oz. 75c.

NEMESIA STRUMOSA GRANDIFLORA

Plants foot high of uniform compact growth, flowers extra large. **BLUE, ROSE-PINK, CRIMSON, ORANGE, SCARLET, WHITE, MIXED.** T. pkt. 15c; $\frac{1}{16}$ oz. 20c; $\frac{1}{8}$ oz. 35c; oz. \$2.40.

NEMOPHILA—CALIFORNIA BLUE BELLS

If you want a flower carpet of unusual beauty, Nemophila is the thing for that purpose. Very few flowers will produce so much beauty with as little effort and little expense as Nemophila. Flowers cup shaped in many bright colors with blue predominating, from April to August. Plants compact, neat, admirably adapted for low borders. The seed should be sown to where the plants are to stand, late in the fall or as early in the spring as the ground is open. Nemophila is also high class for pots. Hardy annual. Height 6 in.

NEMOPHILA INSIGNIS—Sky Blue. **MIXED.** Many colors. Either one: T. pkt. 10c; oz. 45c; lb. \$4.00.

VERBENA VENOSA

Verbena Venosa can be used as a cut flower, for bedding, borders as a pot plant, for covering banks—can be marketed as a hardy perennial. Once established it multiplies fast. There are VERY few flowers as useful to the flower grower as this Verbena.

Because of the war

It is impossible to secure choice stocks of some flower seeds that must be raised by experts to be of the required quality. These choice stocks we used to get mainly from Germany. The war cut us off from this source of supply. We have left the description of such items in the catalog but where we do not quote the price it means that at present we have no seed on hand and may not have for the duration of the war.

NEPETA BLUE WONDER

If you are looking for a high class, blue flowering perennial, Nepeta Blue Wonder is the plant. Its flowers are of great size, color glorious, clear, bright blue. Absolutely hardy, in bloom from May to August. Easy to raise from seed. Vigorous grower—should not be planted when employed as a rock plant, near delicate growing subjects, as Nepeta might crowd these out. Suitable for rockeries, as a border plant for banks and wherever there is a place for a short growing plant, that will stay from year to year and take care of itself. Height 12 in. T. pkt. 30c.

NERTERA DEPRESSA Of compact and neat growth with ornamental, shiny foliage, covered with coral red berries the size of a large match-head. Very beautiful. Delights in light soil, once started can be easily and quickly propagated by division. Should be kept in pots over winter and watered sparingly. Stays in berries for months therefore valuable house plant, also fine for rockeries and fancy bedding. Prefers partial shade. Seed germinates quickly. Tender perennial. Height 4 in.

NICOTIANA—Sweet Scented Tobacco

Start the seed in April, set outdoors in May, 9 in. apart in rich soil and full sun. Produces a wealth of bloom from July to November, fine for groups and large beds. Tender annual.

NICOTIANA CRIMSON BEDDER High class bedding plant of compact growth producing in abundance from June to November beautiful trumpet shaped flowers of deep velvety crimson. A bed of this Nicotiana will be much admired. Started in February is in fine bloom in May. Potted plants sell at sight. Height 2 ft. T. pkt. 15c; 1 oz. \$1.00.

AFFINIS—Three feet high, with hundreds of fragrant blossoms borne for months. Pure white. T. pkt. 10c; oz. 60c.

NICOTIANA SANDERAE—Mixed. Height 2½ ft. T. pkt. 10c; oz. 60c.



NIGELLA MISS JEKYLL

Hardy annual, flowers large in pure white and bright blue, plants bright green with foliage resembling asparagus, very graceful. Sown in March or April outdoors, blooms from May to September. Fine for bedding, borders, rockeries and as a cut flower. Height 20 in. Mixed: T. pkt. 10c; oz. 60c.

GROW NEW FLOWERS

because it pays to do so. Where will you get these new flowers? You can get them from us. We offer the seed of many good ones, absolutely new and very superior. See our novelty pages.

ARENARIA MONTANA is one of the twelve best rock plants thriving in any kind of soil even in pure sand. Its large white flowers form floral snowdrifts defying our hottest sun all summer.

NIEREMBERGIA GRACILIS

Most elegant and beautiful annual plant growing about 15 inches high and bearing a great number of cup-shaped, lavender blue flowers on slender stems in a graceful manner, throughout the season. Fine for bedding, hanging baskets or window boxes, as well as a first class pot plant and cut flower. Sow in February and March indoors or in April outdoors. Does well in half shade as well as when fully exposed to the sun. T. pkt. 20c; ½ oz. 40c.

NIEREMBERGIA HIPPOMANICA

Starts blooming about 15 weeks after sowing and from then on the plants are a solid mass of deep lavender-blue flowers till frost. The plants have a spread of 8-10 inches and are 5-6 inches tall. Fine for edgings, borders, window-boxes, rockeries and pots. Half hardy perennial requires protection over winter in the North. Outblossoms any flower so far known, thrives in extreme heat and is easy to grow. Seed very fine. T. pkt. 30c; 1/64 oz. 50c.

NOLANA GRANDIFLORA

A showy low growing plant, flowers small, deep blue, bell shaped from July to October. Suitable as a pot plant, good for vases and baskets and excellent for covering poor, dry and rocky soils as well as for borders. Sow in the open when all danger of frost is past, for early blooming start under glass. Annual. Height 6 inches.

OENOTHERA—Evening Primrose

Easily raised from seed, doing well in most any soil, enjoying sunshine. The variety listed below is one of the best out of the whole family.

FRUTICOSA MAJOR—Hardy perennial with large, showy yellow flowers nearly 2 inches across, borne on strong, stiff stems. Height 1 to 3 feet, depending on the richness of the soil. T. pkt. 15c.

OXALIS ROSEA DELICATA

A neat, compact growing plant that blooms at all times, summer or winter, always covered with charming bright salmon pink flowers, fine as a house plant, for hanging baskets, borders, etc. Height 6 in. Hender. Pkt. 25c.

OXALIS TROPALEOIDES—Foliage highly ornamental reddish-brown, flowers yellow. Effective as a rock, pot, border, bedding plant as well as for hanging baskets. Annual. Seeds itself therefore as good as a perennial. Height 3 inches. T. pkt. 15c; ¼ oz. 25c.

PARDANTHUS SINENSIS

Easily raised hardy plant, growing thirty inches high and bearing star shaped tigred and marbled red flowers in June and July. Does well in any soil exposed to the sun and never winterkills. Makes a fair cut flower, blooming in June and July. T. pkt. 10c; oz. 60c; lb. \$5.00.

PENNISSETUM

A very showy grass, ideal as a border for canna beds, making a beautiful contrast with their beautiful leaves and plumes. Never get them closer than 18 inches apart. Sow the seed in February, transplant singly into flats and later place them into 3 inch pots. Plant outdoors when danger from frost is past.

RUPPELIANUM—Purple Fountain Grass. Plumes purplish, foliage green, extremely graceful. Height 3 ft. Tender perennial treated as an annual. T. pkt. 10c; oz. \$1.00.

PERILA NANKINENSIS is grown for its blood red leaves which are sometimes striped with green. It grows 18 inches high and makes a neat border for canna beds. If another border of dusty miller on the outside is grown, the effect is striking. Plant a foot apart. If closer than that the stems become crooked. T. pkt. 10c; oz. 40c.

NANKINENSIS CRISPA—Fine variety, with deeply cut and crisped foliage. Very ornamental. The leaves exhale a delicious perfume. Of same usefulness as the above. T. pkt. 10c; oz. 40c.

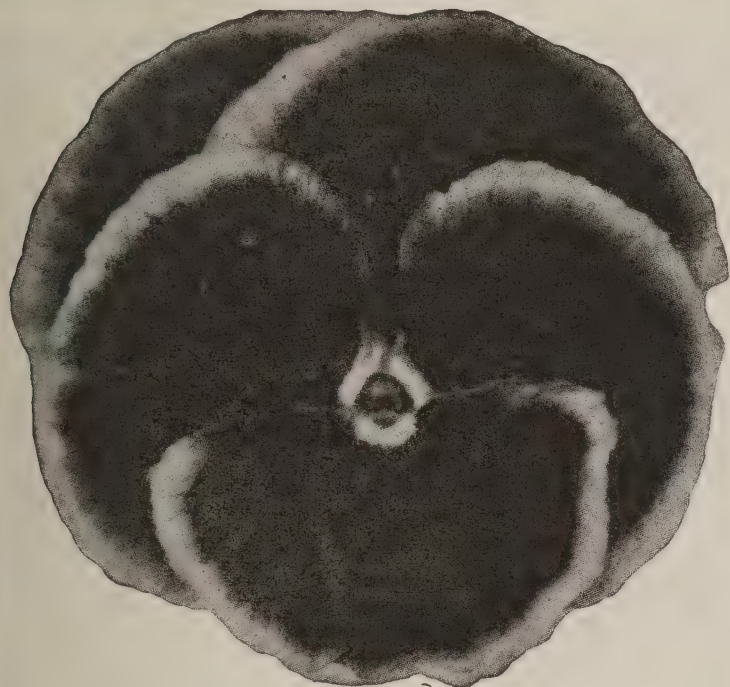
PERILLA DWARF CURLED—P. Macrophylla Compacta. Of compact growth, foliage rich bronze-red gracefully curled, very attractive. Of great value for bedding. Height 15 in. T. pkt. 10c; oz. 40c.

PHYSOSTEGIA

Hardy, robust growing perennial of compact growth, thriving in any kind of soil fully exposed to sun. Very floriferous, in bloom from July to October, fine for cutting. Height 3 ft.

PHYSOSTEGIA VIRGINICA GIGANTHEA—(Vivid). Bears extra large flowers on long stems, deep crimson rose. An excellent cut flower. T. pkt. 15c; ½ oz. 30c; 1 oz. \$1.80.

PHYSOSTEGIA GRANDIFLORA ALBA—Produces well formed, long spikes of extra large snow-white flowers, high class for cutting. T. pkt. 20c.



TYPE OF AMERICA PANSY

The flowers are well rounded, petals thick and velvety, plants dwarf and compact, a combination hard to beat.

PANSY AMERICA

World's Best Pansy

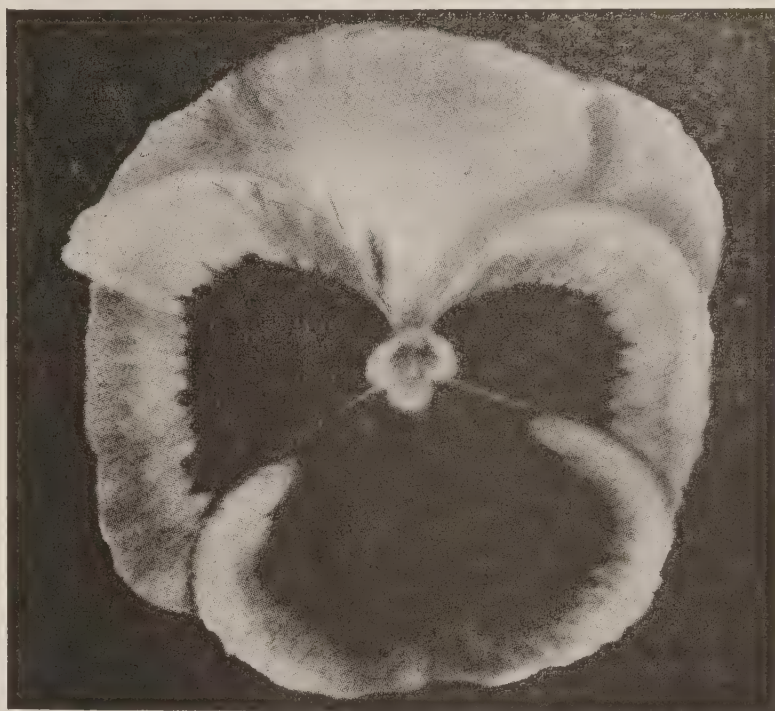
Best of all because its colors are brighter and more varied than those of other pansies, its petals are thick and velvety, the flowers do not curl up and do not look wilted and sick as do many fluted large flowered thin petaled pansies. The plants are of compact and dwarf growth, the blooms are carried on short and stiff stems. In a word Pansy America is so very superior that anybody at a glance can see that Pansy America is **THE PANSY**. It is only a few years ago that we introduced Pansy America. Today every seedman of importance is listing it. A proof that America is way ahead of other pansies.

America Pansy has flowers of great size. In our trials we find that other strains of pansies come close in size to our America and some have even just as big flowers as our America. But the immense size in other pansies is of little value for the reason that, not possessing the thick, velvety, very substantial petals of America the flowers of these large flowered strains curl up or partly close at the first approach of hot weather. All pansies that we tried so far (we have tried a great many strains) grow tall, the plants become "leggy" the wind whips the plants back and forth, the bloom is carried on tall spindly stalks and none can compare with our Pansy America. Pansy America is an early blooming pansy. It beats in earliness other strains of pansies from two to fully four weeks.

We are paying much attention to our plantations of America Pansy, in order to have superior seed. We are sure that the brightest colored, the largest and wide open flowers on short, compact plants will result only by using our strain of America. T. pkt. 30c; $\frac{1}{8}$ oz. 60c; $\frac{1}{2}$ oz. \$1.10; oz. \$8.00; lb. \$85.00.

We are recommending our Pansy America very strongly. This we do because we are absolutely sure that no one, that will try, will be anywhere near disappointed. Pansy America cannot be over-praised. It is as near perfection as anything on this earth can be. You are welcome to a packet containing about 500 seeds absolutely free for the asking so that you can try our strain of A. P. at our expense. Give our Pansy a trial. This done we assure you that Pansy America will be the only Pansy that you will care to grow. This whether you grow pansies for bedding purposes or in the greenhouses for cut flowers. Ask for a free sample.

PANSY AMERICA—Was introduced by us several years ago and proved to be the best of all large flowering pansies. Now there are on the market several strains. If you will grow plants from our seed and also from seed not from us, you will find our strain the best. We try new strains every year. None can compare with our America.



PANSY—PARISIAN MIXTURE

Contains nearly thirty different varieties of Giant-flowering Pansies and embraces all colors known in Pansies. A mixture of high quality, very superior. $\frac{1}{8}$ oz. 50c; 1 oz. \$3.80; T. pkt. 20c.

PANSY EUROPE'S BEST

A mixture of large flowered pansies in a very wide range of colors, dark colors predominating. Quite superior and to be recommended to growers that sell their plants in a market where the competition is not of the keenest sort. Compares favorably with the best there is in large flowered bedding pansies. T. pkt. 35c.

BUGNOT GIANT MIXTURE—Extremely large flowers, broad blotches and from the large spots extend delicate pencilings to extreme edges of petals.

MASTERPIECE—Large flowers, the border of every petal being conspicuously curled and fluted. The plants are very free-flowering, and the numerous blossoms comprise many new tints and colors. T. pkt. 30c.

MASTODON—Sturdy grower, very large flowers, well formed, wide range of colors. T. pkt. 20c; $\frac{1}{8}$ oz. 80c; oz. \$6.00.

TRIMARDEAU MIXED—Includes all known colors in Pansies, blooms not as large as those produced from higher priced mixtures, yet of quite good quality, price considered. T. pkt. 20c; $\frac{1}{8}$ oz. 50c; oz. \$3.80.

PANSY ROGGLI'S SWISS GIANT

A new and very superior mixture of Pansies, extra large in size of flowers, containing some new and very rich colors. T. pkt. 30c; $\frac{1}{8}$ oz. \$1.20; $\frac{1}{4}$ oz. \$2.25.

ENGELMANN'S GIANTS

Very showy early flowering Scottish type of Pansy. Flowers of maximum size in a wide range of colors both light and dark with a good percentage of bronze and reddish shades. Many flowers have a wide gold margin. Plants large, of vigorous growth, rather tall. T. pkt. 30c; $\frac{1}{8}$ oz. 60c; $\frac{1}{2}$ oz. \$1.10.

WINTER BLOOMING PANSY

Sown in July or August will bloom in October and all winter under glass. Plants of compact bushy growth covered with large thick petaled flowers in many colors. Left in the open blooms in October to frost and again in the spring as soon as the snow melts. Protect over winter where the snow does not last all winter. Select specimen plants make first class pot plants. **MIXED.**

OUR TRADE PACKETS

are double the quantity of retail packets. Our retail packets are well filled, the seeds are fresh and of strong germination. You will get only the best from us, so don't be afraid to place the order with us.

Pansies—Separate Sorts

ADONIS—Light blue, center white.
BRONZE BEAUTY—Bronze yellow, veined and blotched.
COLOSSEA VENOSA—Light shades veined and marbled.
EMPEROR WILLIAM—Dark blue, darker eye.
EROS GOLD EDGED—Velvety brown with gold margin.
GOLDEN QUEEN—Pure rich yellow.
KING OF THE BLACKS—Color almost black.
LORD BEACONSFIELD—Dark blue, upper petals white.
MAUVE QUEEN—Mauve.
MME PERRET—Shades of dark vine red.
MERCURY—Velvety purple.
ODIER FIVE BLOTCHED—Large flowered blotched.
PRINCE BISMARCK—Light brown shades with black eye.
PRINCE HENRY—Darkest blue, extra large.
RUBY KING—Tomato red with dark blotches.
ST. KNUD—Golden orange.
SNOW QUEEN—Satin white.
STRIPED—Grotesquely striped and variegated.
VICTORIA—Fire red with a metallic lustre.
VULCAN—Bright brownish red with dark spots.

GIANT PANSY FANAL Color brilliant velvety red without dark eye, immensely effective. In markets where the public demands a high percentage of red flowering plants in mixed pansies Fanal is the Pansy to use for that purpose.

GIANT PANSY PORCELAIN—Color highly appealing, dainty porcelain blue.

GIANT PANSY CORONATION GOLD—Flowers thick petaled, 3 in. across of bright chrome-yellow. Plants dwarf and compact. T. pkt. 20c.

VELVET JEWEL—Velvety purple, flowers of immense size.

PANSY DWARF GIANTS

New. The flowers are of immense size, flat, not curly of heavy substance born well above the foliage on stout stems.

Colors mostly shades of rich velvety blue down to almost black with a good proportion of bright light shades. On our farm where we produce pansy seed we have under observation many varieties and strains of pansies. Among them all Dwarf Giants are one of the most outstanding kind. We are working on the extension of the color range and when we will accomplish that we believe that we will be justified in placing Dwarf Giants at the top of the list. T. pkt. 40c; 1/16 oz. 60c; 1/8 oz. \$1.10; oz. \$8.00.

Pansy

Pansies love a cool, moist, well enriched soil. Seed sown in spring in a partially shaded situation will produce fine plants for autumn flowering. However, as most people want pansies in the spring we will tell you how to proceed to secure the finest and best.

Sow the seed in August or September in a cold frame in rows about four inches apart, covering the seed with 1/16 inch of fine clean sand or sandy soil. This is generally applied by sifting with a screen. Dust the soil with sulphur to keep the damping-off fungus from starting. For the same reason it is advised that the boards of the cold frame be thoroughly clean of any fungus. After seeding pat down with a board and apply a light application of water with a fine spray. Then cover the seed bed with burlap to hold the moisture and hasten germination, being careful, however, to remove the burlap as soon as the plants have sprouted. Failure to do this results in drawn, spindly plants.

Be sure to keep the bed damp, as there is no way of reviving pansy plants or seeds once these have become dry. Neglect here is responsible for seeds falling to "come up." A temperature of 75 degrees or a bit less is just right for sprouting pansies.

When the plants are large enough to handle they are transplanted to stand four inches each way, in cold frames with the richest soil to be had. Pansies must be transplanted but once; the often-er transplanted the smaller the flowers.

When the ground is frozen to a depth of six inches cover the frames well, not to protect against frost, but to insure the ground remaining frozen uninterrupted until spring. There must be plenty of "fall" to the frames, so the water from melted snow and rains will run off quickly; one inch to the foot or six inches for a standard (3x6 ft.) frame is about right.

The above suggestions are for middle northern states, of the latitude of Iowa. Farther south the plants may be transplanted to the open ground with just enough mulch to hide them from view after the ground freezes. One ounce of seed produces 15 thousand plants and over.

The seed of our American Pansy will produce at LEAST twice the number of plants. The seed has an exceptional vitality because grown in the U. S. in sunny, dry climate.

PLUMBAGO CAPENSIS

Half hardy perennial climber of graceful growth, producing from spring till frost large panicles of porcelain blue flowers of extreme beauty in greatest profusion. Fine pot plant for spring sales and a high class cut flower. Will produce striking effect in beds, can be left trailing over the ground, trained to trellises or trimmed into a symmetrical bush. Culture same as Fuchsia. Loves rich soil and sun. Easily raised from seed. Height 3 ft. Price: 10 seeds 20c; 25 seeds 45c; 100 seeds \$1.50.



PANSY OREGON GIANTS—Bright self colors and many five blotched blooms of great beauty and size. MIXED: T. pkt. 30c; 1/8 oz. \$1.00; oz. \$6.00.

PHACELIA CAMPANULARIA

California Bluebell. A beautiful heat and drought resisting annual, in bloom early in the season and lasting in perfection for a long time. Flowers bell shaped, an inch long and nearly as wide, bright gentian blue in color, very showy. Height 8 in. T. pkt. 10c; oz. 60c; lb. \$6.00. Requires perfect drainage.

GIANT PHYSALIS

Chinese Lantern Plant. Hardy perennial about 2 feet tall, producing quantities of fiery scarlet fruits shaped like Chinese paper lantern, used for winter decorations. Giant strain producing "lanterns" of very large size. T. pkt. 15c; 1/8 oz. 30c.

Dwarf Phlox

Unsurpassed for edgings and ribbon beds and as a pot plant. They grow about 8 inches in height, forming dense masses of blooms all summer. The seed germinates in 2 to 4 weeks after sowing. Annual.

CECILY MIXED—Rich, showy colors, extra large flowers.

FIREBALL—Dark and most brilliant red. **FAIRY**—Beautiful pink shade. **SNOWBALL**—Pure white. **VIOLETTA**—Blue with white eye.

MIXED. ANY DWARF PHLOX. T. pkt. 15c; 1/8 oz. 40c; oz. \$3.00.

STAR PHLOX—Dwarf growing, with beautiful star shaped flowers in many colors. T. pkt. 15c; 1/8 oz. 40c; oz. \$3.00.

DWARF PHLOX BRILLIANT The plants of this Phlox will sell fast placed in a full bloom on the market during the spring selling season. Color intense vermilion red (cinnabar), extremely alluring. **PHLOX DRUMMONDI GIGANTHEA**—Individual flowers 1 1/2 inches across, borne in giant trusses on plants 10 inches high. Colors lovely pastel shades, each floret with a large lighter eye. Annual. T. pkt. 15c; 1/8 oz. 40c; oz. \$3.00.

PHLOX PERENNIAL—Phlox Decussata Our mixture contains improved strains forming extra large perfectly round flowers, with petals overlapping each other. Height 3-4 ft. The seed of this germinates slowly, often requiring 5 to 6 months. Mixed T. pkt. 10c; 1/8 oz. 40c; oz. \$2.80.

DIVARICATA CANADENSIS—Hardy perennial native Phlox, producing highly attractive bright blue bloom in sheets, in April and continuing through May. Height 10 in. T. pkt. 20c; 1/16 oz. 40c. Strong 2 year old plants: 3 for 50c, prepaid.

NOVELTIES IN SEEDS

Many novelties are being introduced every year. Not all are of high value. Many of these are untried novelties. We are listing only such novelties that look very promising or that already proved to be of real value.



Phlox Grandiflora Mixed

PHLOX DRUMMONDI GRANDIFLORA

This class of Phlox grows 15 in. tall and the plants must be spaced foot apart. The seed lays 2-4 weeks before it germinates. Start the seed of annual phlox from February to April in a spent hotbed or in a cold frame. Or start the seed in a greenhouse but as soon as the seed is "up" move the sowing into a cold frame. If you will leave the plants in a warm house or carry the plants in a hot bed they are liable to blight. To avoid blight do not start the seed in a greenhouse before February and keep the plants cool. In the open the seed can be sown as soon as the ground is in condition. To get first class plants in pots remove the first bloom, nip the tips of plants and you will get nice bushy plants with a mass of bloom. The seed of every species of perennial phlox is best started outdoors from September to December, the seed covered lightly. From this sowing you will get a full stand early the following spring.

SPLENDENS—Dark brilliant crimson. **ISABELLINA**—Pale yellow. **CINNABARINA**—Dazzling red of unusual brilliancy. **ALBA**—Snow white. **COCCINEA**—Flery scarlet. **ROSEA**—Pink. **VIOLACEA**—Violet-blue. **MIXED**—Any color: T. pkt. 15c; 1/8 oz. 40c;

Pentstemon

There are few perennials that are as valuable as Pentstemon. The plants are long-lived, drought and heat resisting. When other perennials are struggling to just keep alive in hot and dry weather, Pentstemon can be relied upon to produce quantities of real flowers, high class for cutting. Easily raised from seeds, thrives in a variety of soils in shade or sun. Hardy except where noted.

COERULUS—Bright blue flowers in elegant dense spikes of great beauty from May to August. Height 15 in. T. pkt. 15c.

CYANANTHUS—Deep bright-blue flowers of large size in dense clusters from June to August. Hardy perennial. Height 15 in. T. pkt. 15c; 1/8 oz. 30c.

ACUMINATUS—Produces in May and June long, graceful spikes of beautiful lavender blue flowers first class for cutting. Hardy perennial. Height 3 ft. T. pkt. 10c; 1/8 oz. 30c.

PENTSTEMON GLABER—Produces hyacinth like trusses of bright blue in May and June, splendid for cutting. Highly ornamental and perfectly hardy perennial. Height 2 ft. T. pkt. 10c; 1/8 oz. 20c; 1/4 oz. 30c.

GRACIELLA HYBRIDS—This strain produces elegant spikes of graceful flowers in many colors excellent for cutting from June to October. Half hardy perennial blooming first year from seed if sown early. Height 30 in. T. pkt. 15c; 1/8 oz. 40c; oz. \$2.00

SPECTABILIS—Beautiful specie, individual flowers an inch or more long of rich royal blue in long spikes from June to September. Hardy perennial. Height 3 ft. T. pkt. 25c.

PENTSTEMON UNILATERALIS

Produces in May and June 6-10 straight spikes covered from top to bottom with large perfectly placed opalescent blue flowers. Hard to beat as a cut flower. Comes easy from seed and is one of the finest of hardy perennials. Height 3 feet. T. pkt. 15c; 1/16 oz. 20c; 1/8 oz. 35c.

PENTSTEMON GRANDIFLORUS

Conspicuously beautiful, absolutely hardy, thriving in good or poor soil, wet or dry in full sunshine and also in partial shade blooming during May and June. The flowers are bell shaped, carried on a stout stalk resembling foxglove in appearance, of delicate blue color. First rate cut flower. Height 30 in. T. pkt. 10c; 1/8 oz. 20c; oz. \$1.40.

HYBRIDUS PRAECOX—The best of the Torreyi group, remarkable for its great variety of rich colors. Develops to perfection in semi shade and when mulched with a layer of about 5 inches of old manure. In bloom May-June. Fine cut flower. Height 4 ft. T. pkt. 10c; 1/8 oz. 20c; oz. \$1.20.

PENTSTEMON GORDONI SPLENDENS—Produces long erect spikes of rich, dark blue flowers, high class for baskets and bouquets. Height 3 ft. Owing to sudden changes in temperature, Gordoni Pentstemon changes its color. From the most lovely blue it changes into a pink—a lovely color too. Of high value in flower work whether the blooms are blue or pink. In bloom June-August. T. pkt. 15c; 1/8 oz. 25c.

PENTSTEMON SENSATION

Flowers gloxinia-like two inches across, borne on long stems in all colors from pure white to crimson and violet. A percentage of the flowers are beautifully edged with a contrasting color and when grouped in a bed of 10 or more plants the effect is most brilliant. Sensation is not hardy in the North, it is treated same as Antirrhinum. The seed is sown in February and March, the plants start to bloom in July and stay in flower till frost. Protect the plants over winter by light covering or lift with a ball of dirt and store in a frost proof cellar. Height 3 ft. T. pkt. 15c; 1/8 oz. 30c; oz. \$2.20.

SPECIOSUS—Very showy, producing elegant long spikes of rich gentian blue flowers from June to October. Height 3 ft.

PENTSTEMON SPECIAL MIXTURE—Contains every hardy perennial variety listed by us as well as some rare and new varieties to be listed when we will have a sufficient supply of seed. T. pkt. 15c; 1/8 oz. 25c; 1/4 oz. 45c.

Petunias

Because easily raised, free blooming, thriving in any kind of soil if fully exposed to the sun, petunias are highly popular. There are several types. Very dwarf as the Martha Washington, Compact Bedding growing 9 inches tall, common Bedding with rather spreading plants 18 inches tall, Balcony petunias, ideal type for porch boxes, Large Flowered single and double, average height of plants 15 inches, Double Bedding and the All Double. Sow the seed in January to get blooming plants for early spring sales and keep on sowing up to June at which time it is best to sow directly to where the plants are to stand. The seed of large flowering Petunias, single or double, produces robust and also weak seedlings. Save these weak seedlings because these produce the largest and richest colored flowers. The seed being expensive, should be started in heat for best results. Petunia plants are marketed in flats and in pots. Potted plants should be staked and supported, kept pinched back up to middle of May and only then allowed to bloom. Treated that way the plants are bushy and compact with many large flowers.

Balcony Petunias

An excellent type to use in window boxes to trail down the sides for a hanging effect. The most floriferous of all large flowered petunias. Plants 18 to 24 inches high and will spread or trail as much as 36 to 40 inches. Flowers single three inches across.

BALCONY BLACK PRINCE—Deep velvety red. **BALCONY PINK**—Clear deep rose, golden throat, extremely attractive. **BALCONY WHITE**—Snowwhite, bright and clear, very free. **BALCONY DARK RED**—Satin crimson, very large flowers. **BALCONY ROYAL PURPLE**—Velvety dark blue. **BALCONY RED WONDER**. Bold bright-red, flowers close to 4 inches across. **BALCONY STAR OF CALIFORNIA**. Deep velvety violet starred white in irregular fashion. **BALCONY MACULATA**. Large flowered white, striped and spotted deep rose-red, yellow throat. Highly attractive. **BALCONY MIXED**. ANY COLOR: T. pkt. 15c; 1/32 oz. 25c; 1/8 oz. 35c; 1/4 oz. 65c; oz. \$4.00.

BALCONY QUEEN—An extra large flower, larger than any other type of Balcony Petunias, deep velvety blue with rays and blotches of pure white of striking beauty. A most conspicuous and beautiful variety that no florist should overlook.

All-Double Petunias

Comes true from seed, most of the plants producing very large, double, mostly fringed flowers. The plants are of compact habit of growth, extremely floriferous. Of great importance to the florist is the quality of the seed. The seed we offer is the best obtainable. Sow Double Petunia early—from November to middle of January—to produce plants in full bloom for Mother's Day and for spring sales.

PETUNIA ALDOUBLE VICTORIOUS

APPLEBLOSSOM (Daintiness)—Salmon pink. Height 12-15 inches. **AMARANTH-RED.** Bright amaranth-red. Height 10 inches. **GAIETY.** Color, rose, red and white. Height 12 in. **LOVELINESS.** Clear La France pink. Height 10 inches. **ORCHID BEAUTY.** Light lilac, veined violet. Height 12 in. **ROSE-CARMINE.** Same as World Beauty. **MIXED.**

ALDOUBLE VICTORIOUS PETUNIA MIXED

Cannot supply ALL DOUBLE PETUNIA.

ALDOUBLE WORLD BEAUTY

From the florists' standpoint a perfect flower. Plants uniformly 10 inches tall, the blooms one like the other in size, color and form. Produces practically 100% double, fringed flowers 4 inches across, of the most beautiful rosy-carmine color.



Type of Large Flowering Double Petunia
EXTRA DWARF PETUNIAS

PETUNIA MARTHA WASHINGTON—Plants covered with large, single, wide open ruffled flowers. Color bluish pink with rich wine red throat heavily veined. Height 9 in. T. pkt. 20; 1/64 oz. 70c; 1/32 oz. \$1.20; 1/16 oz. \$2.20; 1/8 oz. \$4.00; oz. \$24.00.

PINK GEM—Plants only 5 in. tall spreading to 8 in. across. Color soft pink. T. pkt. 15c; 1/16 oz. 80c; 1/8 oz. 55c; oz. \$4.00.

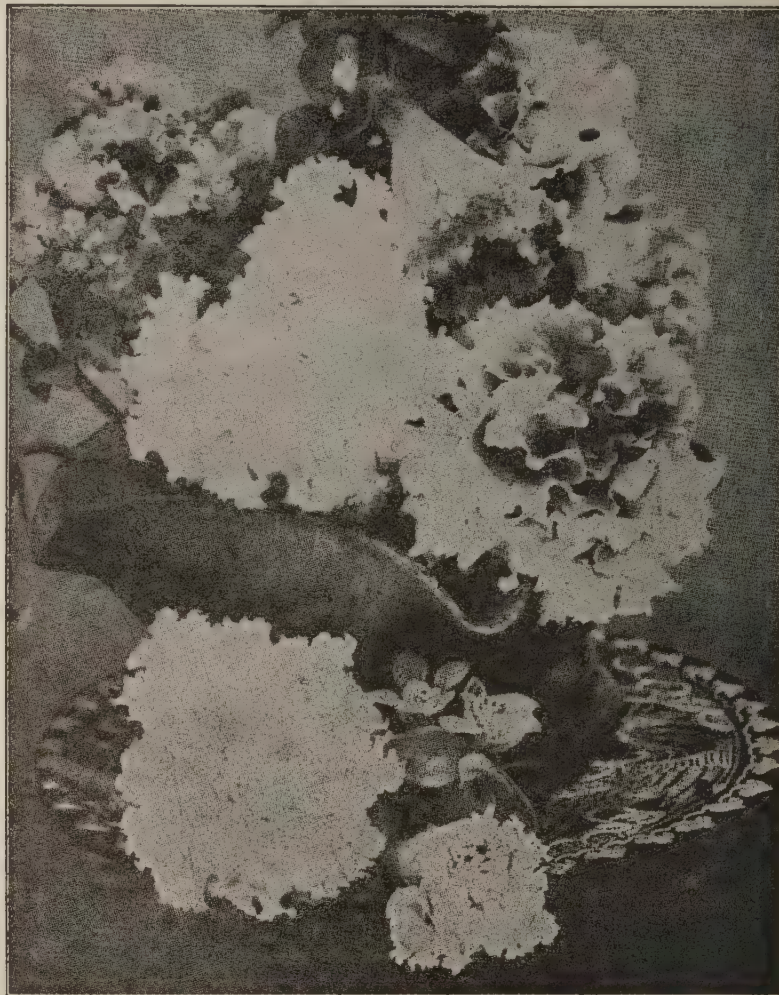
BRILLIANT ROSE GEM—Flowers rich deep rose with a satiny sheen, plants 6 inches tall, 8 inches in diameter covered with bloom. T. pkt. 15c; 1/16 oz. 40c; 1/8 oz. 75c; oz. \$5.40.

ADMIRAL. Plants uniformly extra dwarf and bushy, flowers large of rich deep violet-blue. Ideal for pots and bedding. T. pkt. 25c; 1/32 oz. 80c; 1/16 oz. \$1.50; oz. \$20.00.

PETUNIA ROYAL GEM New. Plants of uniform and very compact growth, covered with large bright crimson-carmine flowers beautifully contrasted to the pure white lightly veined carmine throat. Height 6 inches. T. pkt. 20c; 1/16 oz. 40c; 1/8 oz. 75c.

PETUNIA VIOLET GEM—Plants ball-shaped covered throughout the season with velvety-violet flowers 1 1/2 in. across. Height 8 in. T. pkt. 15c; 1/16 oz. 35c.

PETUNIA VELVET BALL New. Plants round, compact, ball shape, only 8 inches tall with 12 to 15 flowers in bloom at a time. Flowers 2 1/2 inches across, wide open and of a deep luscious shade of velvety blood red. T. pkt. 15c; 1/32 oz. 25c; 1/16 oz. 45c; 1/8 oz. 85c; oz. \$6.00.



Petunia Double Marvels

Double Petunia

While a fair percentage of Double Petunia seed will produce double flowers, some will not, but the singles will be of unusual fine quality, richly colored and finely marked. The weaker seedlings should be carefully saved as these generally produce the finest double flowers. Our mixture is composed of the best and largest strains grown.

DOUBLE FRINGED MIXED. T. pkt. 25c; 500 seeds 65c; 1000 seeds \$1.00; 1/64 oz. \$3.50.

PETUNIA DOUBLE MARVELS

Surprisingly beautiful, robust in growth, producing from seed better than seventy per cent of double flowers. It is impossible to fully describe the many varieties in form and color—brilliant crimson, pink, blue, lavender, white, etc. The blooms are never less than three inches in diameter and many are five inches across. They are frilled, ruffled and fluted; of unequalled beauty. Will prove a much better paying flower to the florist than geraniums and we believe that in time will replace geraniums to a large extent as a bedding plant. Florists that raised Double Marvels for trial had one regret only—that they did not sow and produce more plants as Double Marvels were selling fast and at double the price received for geraniums. Price: 500 seeds 75c; 1,000 seeds \$1.25; 5000 seeds \$4.00; T. pkt. 30c.

PETUNIA DWARF RAMONA GIANTS

A fine strain of Giant Single Petunias for pot culture. We have checked this type against many in our experimental grounds and consider it the most compact Giant Flowering Petunia, with best formed flowers of any dwarf type on the market. When in full bloom, the plants show nothing but colorful flowers, immense in size, with open throats, beautifully veined and marked. **DARK AND**

LIGHT SHADES MIXED. T. pkt. 30c; 1/32 oz. \$1.75; 1/16 oz. \$3.25; 1/8 oz. \$6.25; oz. \$48.00; 1/64 oz. 90c.

DWARF RAMONA GIANTS DARK SHADES

This mixture contains dark, pronounced colors only. **PRICE:** Same as for RAMONA DARK AND LIGHT SHADES MIXED. T. pkt. 30c; 1/32 oz. \$1.75; 1/16 oz. \$3.25; 1/8 oz. \$6.25.



Type of Large Single-fringed Petunia

PETUNIA GIANT FLOWERING SINGLE

ELK'S PRIDE—Single plain edged very large flowers of deep velvety violet-blue. Plants compact. T. pkt. 20c; 1/64 oz. 70c; 1/32 oz. \$1.20; 1/16 oz. \$2.20; 1/8 oz. \$4.00; 1 oz. \$30.00.

GIANT FLAMING VELVET—Flowers very large, plain edged, single of luscious velvety blood-red. T. pkt. 20c; 1/64 oz. 70c; 1/32 oz. \$1.20; 1/16 oz. \$2.20; 1/8 oz. \$4.00; oz. \$30.00.

DWARF PINK GLORY—One of the most profitable for the florist. Potted plants in bloom sell fast at a good price. Flowers 3-4 in. across, single, plain edged very bright flame rose-pink. Plants very compact 10-12 in. tall. T. pkt. 30c; 1/64 oz. 80c; 1/32 oz. \$1.50.

COPPER RED—Shining coppery-red with darker throat, a very appealing color. Flowers large, ruffled and of perfect form. T. pkt. 25c; 1/64 oz. 85c; 1/32 oz. \$1.50.

ROYAL PURPLE FRINGED—Fringed flowers of intense violet blue. T. pkt. 15c; 1,000 seeds, 60c; 1/64 oz. \$1.00; 1/32 oz. \$1.90.

KARLSRUHE RATHAUS—Very large flowers of beautiful violet blue. T. pkt. 20c; 1,000 seeds, 75c; 1/64 oz. \$1.00; 1/32 oz. \$1.90.

ROYAL PURPLE—Very beautiful intense violet purple. T. pkt. 15c; 1,000 seeds, 60c; 1/64 oz. \$1.00; 1/32 oz. \$1.90.

SNOWSTORM—Glistening white, shading yellow in throat, flowers waved 4 to 5 inches across. The most floriferous of all white Petunias. Height 12 in. T. pkt. 25c; 1/64 oz. \$1.20.

PETUNIA GLAMOUR—Easily the most striking Petunia we have ever seen. Color luscious shade of salmon-rose delicately veined brown in a creamy open shallow throat. Flowers heavily ruffled 5 to 6 inches across freely produced on plants 18 to 20 in. tall. T. pkt. 50c; 1/64 oz. \$1.00; 1/8 oz. \$1.85.

ROMANY LASS—Huge deep velvety crimson flowers with purplish black throat. Plants compact very free flowering, 15 in. tall. T. pkt. 30c; 1/64 oz. \$1.00; 1/32 oz. \$1.75.

PRINCESS OF WUERTEMBERG—Flowers very large, heavily ruffled, bright rose, throat garnet, veined purple. T. pkt. 30c; 1/64 oz. 80c.

GIANT RUFFLED—The flowers of this strain are ruffled and fringed, colors rich and gorgeous, with charming deep throats of various shades. T. pkt. 25c; 1/32 oz. \$1.50; 1/16 oz. \$2.75.

GIANTS OF CALIFORNIA—Blooms frequently more than 5 inches in diameter, the colors indescribably rich and varied, fringed, superbly marked and veined. T. pkt. 20c; 1/32 oz. \$1.25; 1/16 oz. \$2.00; 1/64 oz. 65c; oz. \$40.00.

DWARF COMPACT BEDDING PETUNIAS

CREAM STAR—Flowers star-like, five-pointed, light cream at the edges with deep yellow throat. Plants dwarf, bushy, of uniform habit of growth, in bloom all summer. T. pkt. 10c; 1/8 oz. 35c; 1/4 oz. 50c; oz. \$4.00.

FIRST LADY—Beautiful clear light pink, flowers large, plants foot high, compact, covered with bloom. T. pkt. 15c; 1/8 oz. 30c; 1/4 oz. 55c.

TOPAZ QUEEN—Fiery, velvety rose, a very brilliant color, will not fade out. Dwarf, compact habit, large flowers and many of them. T. pkt. 20c; 1/8 oz. 40c; 1/4 oz. 70c; oz. \$3.20.

TWINKLES—Brilliant deep rose with clearly defined white star. Plants erect, compact, full of bloom all summer till frost. If you grow plants for spring sales do not omit Twinkles as that is a petunia that will show you good profit. You will increase your sales if you will place three plants of Twinkles in a three inch pot, bring the plants to bloom in May. When in bloom there will be no end of buyers. T. pkt. 15c; 1/16 oz. 25c; 1/8 oz. 40c; oz. \$3.00.

TYRIAN ROSE—Flowers bright deep rose, three inches across with a delightful creamy throat. T. pkt. 15c; 1/16 oz. 30c; 1/8 oz. 45c; oz. \$3.00; lb. \$36.00.

DWARF COMPACT BEDDING PETUNIAS

These grow erect, very compact and are a splendid class for bedding, flower boxes as well as for pot culture.

ALDERMAN—Deep violet blue. T. pkt. 10c; 1/16 oz. 20c; 1/8 oz. 30c; oz. \$1.60; lb. \$20.00.

CELESTIAL ROSE—Brilliant deep rose, brighter than the color of Rose of Heaven. T. pkt. 20c; 1/16 oz. 35c; 1/8 oz. 65c; oz. \$3.20.

COCKATOO—Velvety deep violet purple with an irregular edge of glistening white, also spotted and starred white. A grand sight when massed in beds. Our strain is remarkably true and pure type.

DAZZLER—Bright rose, same shade as Dwarf Pink Glory in the Giant flowering class. T. pkt. 15c; 1/8 oz. 40c; oz. \$3.60.

GLORIA—Dazzling carmine rose, perfectly charming flower. T. pkt. 10c; 1/8 oz. 35c; oz. \$2.40; lb. \$22.00.

GLOW—Dazzling carmine-red, flowers 2 inches across. T. pkt. 15c; 1/16 oz. 45c; 1/8 oz. 85c; oz. \$6.00.

GRENADE—Brilliant carmine red, a highly attractive new color. T. pkt. 10c; 1/8 oz. 20c; oz. \$1.20; lb. \$15.00.

HEAVENLY BLUE—Our extra select strain of this petunia produces a profusion of bright blue flowers and comes very true from seed. T. pkt. 10c; 1/8 oz. 35c; oz. \$2.40.

PERIWINKLE—Plants compact producing a profusion of mid-blue flowers. Comes very true from seed. T. pkt. 10c; 1/16 oz. 20c; 1/8 oz. 30c; oz. \$1.60; lb. \$20.00.

KING HENRY—Velvet Ball is better

RITA—Rich deep violet-blue, very conspicuous. T. pkt. 10c; 1/16 oz. 35c; 1/8 oz. 50c; 1 oz. \$4.00.

ROSE No. 22—Plants compact, half globe shape covered with bloom of bright rose-pink. What we offer is extra choice stock of even growth. T. pkt. 20c; 1/16 oz. 35c; 1/8 oz. 60c; oz. \$4.00; lb. \$40.00.

ROSE OF HEAVEN—Fiery pink flowers on short compact globular bushes literally covered with bloom and especially effective as a pot plant. More compact and more attractive than the popular Rosy Morn variety. T. pkt. 10c; 1/8 oz. 30c; oz. \$2.00; lb. \$20.00.

ROSY MORN—Throat silvery white, outer edge heavily shaded soft rose pink. T. pkt. 10c; 1/8 oz. 35c; oz. \$2.40; lb. \$22.00.

SNOWBALL—Pure white. T. pkt. 5c; 1/8 oz. 20c; oz. \$1.40; lb. \$18.00.

WHITE PEARL OR SNOW QUEEN—Long looked for variety. Snow white, much larger than anything existing before, flowers of much substance, extra. T. pkt. 10c; 1/16 oz. 25c; 1/8 oz. 40c; oz. \$2.40.

PETUNIA COMPACTA FINEST MIXED—Contains all the compact, short, upright growing bedding varieties in the many colors. T. pkt. 10c; 1/16 oz. 20c; 1/8 oz. 30c; oz. \$1.80; lb. \$20.00.

SPREADING BEDDING PETUNIAS

An excellent class free blooming ideal for mass planting, borders and boxes. Bedding Petunias of delicate coloring fade out in the strong Iowa sun. For that reason we do not list petunias that are of delicate yellow, lavender and similar shades. Faded out flowers are no ornament. For bedding purposes, varieties of pronounced colors such as deep blue, crimson, pink, etc., are the thing.

ALBA—Pure white. T. pkt. 10c; 1/8 oz. 20c; oz. \$1.60; lb. \$16.00.

BLUE BEE—Deep violet-purple. T. pkt. 10c; 1/8 oz. 20c; oz. \$1.60; lb. \$16.00.

FLAMING VELVET—Flowers large, wide open, color velvety blood red. T. pkt. 15c; 1/16 oz. 35c; 1/8 oz. 60c; oz. \$4.00.

GENERAL DODDS—Dark red, very fine. T. pkt. 10c; 1/8 oz. 20c; oz. \$1.00; lb. \$12.00.

HOLLYWOOD STAR—Rich rose, amber throat, star-like flower. T. pkt. 10c; 1/8 oz. 25c; oz. \$2.80; lb. \$20.00.

HOWARD'S STAR—Dark, velvety purple with a five pointed white star. Our strain is extra select with regular, pure white stars sharply defined. T. pkt. 10c; 1/8 oz. 25c; oz. \$1.80; lb. \$18.00.

LUMINOSA—Flowers large, rich rose of unusual brilliancy. The most vividly colored petunia in this group. T. pkt. 10c; 1/16 oz. 25c; 1/8 oz. 40c; oz. \$2.80; lb. \$32.00.

RADIANCE—Rich cerise-rose, salmon undertone, golden yellow throat. In brilliancy of color there is at the present no Petunia, regardless of type that can surpass Radiance. T. pkt. 15c; 1/16 oz. 35c; 1/8 oz. 60c; oz. \$4.00.

ROSE KING—Rich rose, white throat, extra large flowers. T. pkt. 10c; 1/8 oz. 15c; oz. 80c; lb. \$10.00.

SPREADING PETUNIA FINE MIXED—Includes all the known colors of the small flowered bedding varieties. T. pkt. 10c; oz. 80c; lb. \$8.00.

PLATYCODON is a flower that every florist and grower of flowering plants should know. Try Platycodon.

QUALITY SEEDS The quality of our seeds is the very best every time in all cases. In actual field trials we find that our seeds are the equal and in MANY cases of better quality than seeds from other sources. Lower prices asked by us NEVER mean low quality. Our policy is—give the customer most for their money.



Petunia Theodosia

PETUNIA THEODOSIA

Extra large, fringed, pink flowers, with well defined golden throat, very conspicuous, a flower that sells at sight. Won first prize at the Boston Flower Show in 1928. All florists that grew Theodosia report good sales at much better prices than is possible to get for geraniums. T. pkt. 30c; 1/64 oz. \$1.00; 1/32 oz. \$1.75; 1/16 oz. \$3.25; 1/8 oz. \$6.25; 1 oz. \$48.00.

PETUNIA BLUE THEODOSIA

Very large flowers of deep, metallic-blue with a silver sheen, the throat intensely, deep blue, the whole, beautiful, fringed flower veined with delicate lines of blue-black. T. pkt. 30c; 1/32 oz. \$1.75; 1/16 oz. \$3.25; 1/8 oz. \$6.25; oz. \$48.00.

PLATYCODON—Chinese Bell Flower

A campanula-like flower of uncommon beauty, blooming during June and July, perfectly hardy if planted deep, the crown covered with 2-3 inches of soil. Most valuable cut flower, splendid in wreaths and sprays. If your business is to sell hardy plants have plenty of platycodon. See to it that visitors and passers-by will see your plants—you will sell no end of them. If sown in February will bloom the same year in July. Try platycodon, you will find that it is a magnificent plant from every viewpoint.

GRANDIFLORUM—Flowers cupped, star shaped, large, showy and graceful, with good keeping qualities. The seed we offer produces quite a percentage of semi-double flowers. Height 3 ft. **BLUE—WHITE—MIXED**. Any color: T. pkt. 10c; oz. 60c; lb. \$6.00.

PLATYCODON MARIESI. Of dwarf and compact habit with very large open bell-shaped flowers. Height 2 ft.

MARIESI BLUE—WHITE—MIXED. Any color: T. pkt. 10c; 1/8 oz. 20c; oz. \$1.40.

POLEMONIUM COERULUM

Hardy perennial bearing charming sky-blue flowers in large clusters from April to July. Requires rich soil. Height 2 ft. T. pkt. 15c.

POLEMONIUM RICHARDSONII—Flowers light blue with golden yellow anthers with a fragrance of ripened grapes from May to September, excellent for cutting. Perennial. Height 20 inches. T. pkt. 15c.

POLYANTHUS—See Primula Veris.

POLEMONIUM COERULUM PRIMA DONNA

Hardy perennial of robust growth, doing well in any kind of soil and under the hardest conditions, producing elegant, graceful, hyacinth like flowers of delicate clear blue. High class for cutting. In bloom from April to July. Height 2 ft. T. pkt. 15c.

ASTER PRINCESS SALMON ROSE (Princess Bonnie) is an aster of exceptional merit especially valuable to wholesale growers either for local marketing or long distance shipping. Color lustrous soft salmon rose shade, flowers large on strong stems with remarkable keeping qualities. Almost 100% wilt resistant.



Type of Single Iceland Poppy

ICELAND POPPIES—Papaver Nudicaule

These produce myriads of brilliant flowers, delicately perfumed on stalks, foot high, from early in May till frost if not allowed to seed and planted in gritty or sandy soil. There is a certain class to these flowers and a strong appeal that makes them ready sellers and there is no flower that is more profitable to grow. In European markets millions of blooms are being sold every season and the wonder is that they are not being grown more liberally by the florists in this country. Fall is the best time to plant them, but they will bloom the same year if planted early in March. For shipping they should be cut in bud stage. Absolutely hardy. Height 15 inches. Perennial. Should be spaced to 5 inches apart and exposed to full sunlight.

Sow the seed in July and August to get a big crop of bloom the following spring and summer.

ICELAND POPPIES DOUBLE MIXED—Besides white, yellow and scarlet the colors are straw, cream and deep orange shades. T. pkt. 15c; 1/16 oz. 25c; oz. \$3.00; 1/8 oz. 45c.

ICELAND POPPIES SUNBEAM—New improved Iceland Poppies with flowers of gigantic size in all colors, borne on long stiff stems. Single. Height 18 inches. T. pkt. 10c; 1/8 oz. 30c; oz. \$2.00.

FAKENHAM HYBRID—Result of a cross made from Sunbeam, Coonara and a Thibetian poppy. Plants of vigorous growth, flowers of good size, more open than is the rule, borne on long slender wiry stems. Free, graceful and practically perpetual flowering. Wide range of colors, including many new shades. T. pkt. 15c; 1/8 oz. 30c; oz. \$2.20.

SANFORD'S GIANT—Very outstanding strain of Iceland poppies of vigorous growth flowers 4 to 6 inches across on extra strong stems in a wide range of colors. Height 2 ft. T. pkt. 15c; 1/8 oz. 30c; oz. \$2.00.

DOUBLE PORTULACA—ROSE MOSS

Our seed produces perfectly formed flowers, mostly fully double, ranging from 1 1/2 inches to 2 1/2 inches across. The range of colors is the most extensive that we have ever seen, with many new and beautiful pastel shades. Seed of our own growing of superior quality. **MIXED**. T. pkt. 10c; 1/8 oz. 30c; oz. \$2.00; lb. \$28.00.

PORTULACA PARANA The flowers of this variety, which comes in one color only, distinct lovely bluish rose, are the size of a dollar piece and appear in great profusion till frost. Very showy. T. pkt. 10c; 1/8 oz. 15c; oz. \$1.00; lb. \$14.00.

PORTULACA LARGE FLD. Single —Mixed. T. pkt. 10c; 1/8 oz. 15c; 1 oz. 80c; lb. \$8.00.

PYRETHRUM TSCHIHATCHEWII

Unexcelled as a border plant, and for carpeting. Very dwarf, fine, moss-like foliage, thriving in poor soil and withstanding heat and drought to such a degree that it is used in Southern Europe for lawn making in places too hot and dry, where no grass will grow. Hardy perennial. Height 6 in. T. pkt. 10c; 1/8 oz. 35c.

CONSULT the front pages of this catalog. You will find many important novelties listed on those pages.

Poppies

All poppies are first rate cut-flowers. They must be cut just before the flowers are ready to open and to prolong their blooming period all seed pods must be removed promptly. The annual sorts are hard to transplant, are best sown to where they are to stand or potted off singly. Thin out as soon as large enough. In bloom from May to August. Height 2-3 ft.

The above applies to annual poppies. Iceland, Alpine, Flanders and Tulip poppies can be sown in the spring or late in summer. Seedlings from summer sowings should be protected over winter with brush, over which is laid hay or straw. Laying of straw directly on top of the seedlings would cause them to rot. Oriental poppies can be sown spring or summer, they need no protection over winter, the important thing to remember is that Oriental poppies must be transplanted in the fall—never in the spring.

DOUBLE ANNUAL POPPIES

	T. Pkt.	Oz.	Lb.
SHIRLEY MIXED—Very double.....	10	45	4.00
PEONY FLOWERED MIXED.....	10	45	4.00
GIANT DOUBLE MIXED.....	10	45	4.00

SINGLE ANNUAL POPPIES

	T. Pkt.	Oz.	Lb.
FLANDEBS—Scarlet battle field poppy.....	5	25	1.75
IMPROVED SHIRLEY MIXED.....	5	25	2.00
BLUE SHIRLEY—Remarkably beautiful.....	5	25	

GIANT ORIENTAL POPPY

All Oriental Poppies listed by us, Miniature Hybrids excepted, are varieties that produce immense flowers 6 to 8 inches across. You will get flowers of gigantic proportion also from our MIXED seed. The proper time to sow O. Poppies is early in the spring, the proper time to transplant is in the fall. Never transplant O. Poppies in the spring.

	T. Pkt.	1/2-Oz.	Oz.	Lb.
ROYAL SCARLET—Very large.....	.10	.20	1.20	12.00
PRINCESS—Salmon rose .....	.10	.20		
MISS PERRY—Light salmon .....	.10	.15	.80	
BEAUTY OF LIVERMORE—Fine large crimson .....	.15	.30	2.00	
ORIENTAL MIXED .....	.10	.15	.80	

OLYMPIA—Semi-double flowers, very large, brightest scarlet, during May. Height 3 ft. T. pkt. 20c.

PLANTS of Olympia Poppy. (Fall delivery). 5 plants for 50c, prepaid.

TULIP POPPY An annual, but it should be sown in the fall for best results and finest blooms. The flowers are large, dazzling scarlet, effective for beds or masses. T. pkt. 10c; 1 oz. 45c; lb. \$4.40.

SPECIAL MIXTURE This includes all the double as well as single annual poppies. Pkt. 10c; oz. 45c; lb. \$4.00.

CALIFORNIA POPPY—(See Eschscholtzia)

ALPINE POPPY Papaver Alpinum. Hardy perennial of great beauty, fine for rockeries and pots. Started early, produces cup shaped single flowers 3-4 in. across in a wide range of colors from May to September. Our mixture is made from separate colors and includes the lovely fringed as well as the new Kerner species. Height 6 in. MIXED: T. pkt. 20c; 1/64 oz. 30c.

Pyrethrum-Painted Daisy

Dependably hardy perennials of vigorous growth. Pyrethrum Roseum blooms in May and June and again late in fall producing a heavy crop of fine daisy-like flowers that are much in demand for decoration Day. To have a good collection of P. Roseum will be to your advantage. P. Uliginosum has large, white daisy-like bloom in September and October. Thrives in any soil even in spots too damp for other flowers. P. Aureum and Tschihatchewi are foliage plants that will stand shearing and are excellent for borders. Pyrethrum Roseum grows from 2 to 3 feet high.

ROSEUM DOUBLE MIXED—The flowers are large and beautiful, saved from isolated and finest double flowers, however, the seed produces some single flowers occasionally, especially so the first year after sowing. T. pkt. 20c; 1/16 oz. 35c;

ROSEUM BLOOD RED—T. pkt. 15c; 1/8 oz. 45c.

ROSEUM KELWAY'S HYBRIDS—The flowers of this strain grow to an enormous size of 12 inches in circumference and present all the beautiful variations of color between light rose, pink and deep carmine. An excellent cut flower. 1/8 oz. 45c; oz. \$3.20; T. pkt. 20c.

PYRETHRUM ULIGINOSUM—Forms large shapely bushes covered with very large white daisy-like flowers late in summer. Height 4 feet. Space the plants 15 inches apart. T. pkt. 10c; oz. \$2.00; 1/8 oz. 30c; 1/16 oz. 20c.

FOLIAGE PYRETHRUMS FOR BEDDING

PYRETHRUM AUREUM—(Golden Feather. The finest of all perennial plants suitable for edgings, carpet, bedding, ribboning, etc. Perfectly hardy, forming neat graceful bushes about 8 inches in height. The foliage is attractive yellow color, very handsome. T. pkt. 10c; oz. 60c; lb. \$4.20.

WHENEVER PRICES ARE not quoted in our catalog it means that we are unable to supply the seed.



PRIMULA CHINENSIS FIMBRIATA

Large flowered, fringed varieties, seed from prize-winning pot grown plants by a noted European hybridizer. Better seed than ours does not exist. Height 9 in.

SUPERB MIXTURE—100 seeds 25c; 500 seeds 90c; 1,000 seeds \$1.75.

Primula

Sow the seeds of Chinese Primula in clean flats, filled with sifted leaf mould, loam and sand in equal parts, do not cover just press into the soil. At first keep the box in half shaded place and water carefully in a fine spray. As soon as the seeds are sprouted place in the lightest spot in the house. Transplant into pots as soon as the plants are large enough to handle. Give plenty of air, water carefully. During fall and winter grow Primulas in a night temperature of 45 deg. to get high class blooming plants. Keep shaded and as cool as you can during summer and NEVER allow the plants to go dry. The plants will stand no crowding. On very hot days spray twice a day.

Primula Obconica, Malacoides and Forbesii are more free flowering and much easier to raise than the Chinese variety. Use same methods as given above only Obconica you must not use leaf mould or peat as this causes the seed to germinate poorly.

For winter sales sow the seed of Obconica and Chinensis in March and April, Malacoides being more vigorous grower should not be sown before July.

PRIMULA OBCONICA M & M

ATROSANGUINEA MOHNSTEIN—Dark, blood red, plants of compact growth, extremely floriferous.

ATROSANGUINEA MUELLER—Blood red, not quite as dark as the Mohnstein type, producing flowers freely even during the dark winter months. **ROSEA MUELLER**—Pure pink.

HAMBURG RED—Glowing dark rose pink, early and large flowering. Plants of compact growth, loaded with flowers. The most accommodating of the greenhouse primulas, easy to raise and bring to bloom.

WYASTON WONDER—Brilliant crimson, flowers of extreme size. **LIEBESGLUT**—Fiery dark scarlet, long strong stems, compact growth.

FASBENDER—Deep glowing red, flowers very large, a perfect type for pots.

PRIMULA OBCONICA GIGANTHEA

The varieties named below are all the new GIANT ARENDSII strain with extra large flowers. Height 12 in.

CRIMSON—DEEP LILAC—SOFT PINK (Salmon Queen)—**DARK BLUE—RICH PINK—MIXED.**

PRICE FOR ALL OBCONICA PRIMULAS NAMED ABOVE: 100 seeds 20c; 500 seeds 60c; 1,000 seeds \$1.00; 1/64 oz. \$2.00; 1/32 oz. \$3.50.

PRIMULA OBCONICA, as well as some other Primulas, are of slow germination if the seed is not sown within 4 months after ripening. When the seed is 1 year old it will not germinate but kept another year the same seed will come perfect. At the end of another year it comes fairly well but the fourth year it again germinates perfectly. If your seed does not come, do not discard the sowing. Read what we say under the heading "Seed Germinates Slowly", on page 60 of this catalog.

BEAUTY OF LIVERMORE O. P.

Oriental Poppy Beauty of Livermore is a variety that does come true from seed. It is a very robust grower producing in profusion very large dark crimson flowers with black blotch. Of striking beauty, perfectly hardy and long lived. T. pkt. 15c; 1/8 oz. 30c; oz. \$2.00.



Primula Veris

PRIMULA MALACOIDES

(Improved Baby Primrose)

Freest flowering of all Primulas, forming tufts of light green leaves and carrying on wiry stems about 10 inches long, whorls of graceful flowers in 4 months from date of sowing. While other primulas must be started for winter blooming in April, Malacoides should not be sown before the first week in July. Height 15 inches.

Sown in August, wintered over in a cold frame or in a cold greenhouse, will produce first class bloom in small pots from January to April. Unlike Obconica its foliage is harmless even to the skin of the most delicate persons.

TRUE ROSE—Large clear carmine-pink. **GIGANTHEA**—Vivid lilac. **SNOW QUEEN**—Extra large, snow-white. **DEEP PINK, DARK RED, DARK BLUE, MIXED.** Any variety. T. pkt. 25c; 1/64 oz. about 5,000 seeds, 50c; 1/32 oz. 80c; 1/16 oz. \$1.50; 1/8 oz. \$2.25; oz. \$14.00.

Hardy Primulas

After sowing the seed of hardy primula, place the flats or pans in a dark place and move to light when the seed is sprouted. The seed is best sown in January, flats placed in cold frames covered with snow and kept heavily shaded. Treated thus the seed comes as a rule in the early spring.

The seed of Primula Cashmeriana, Acaulis, Elatior (Veris) germinates reliably even when not exposed to frost and can be sown at any time.

HARDY PRIMULAS can be easily forced, handled like violets and furnish lots of high class bloom at a time when flowers are flowers.

PRIMULA AURICULA

Primula Auricula. Fragrant hardy perennial. Many rich colors. An extremely free bloomer. Height 6 inches. 1/8 oz. 35c; 1/4 oz. 60c; T. pkt. 10c.

PRIMULA CASHMERIANA

A real gem. Large, dense, globular heads of flowers of pleasing lavender color, born on stout stalks high above the foliage. In bloom from early in April till June. Perfectly hardy, thriving in the most exposed places. High class for rockeries. An excellent cut flower, forces easily. Height 15 in. T. pkt. 40c.

ENGLISH PRIMROSE

Primula Vulgaris. The wild English flower, color light canary yellow, fragrant. Hardy perennial. Height 8 in. T. pkt. 10c; 1/4 oz. 35c; oz. \$2.40.

PRIMULA BEESIANA

Flowers bright velvety purple in May and June. Very floriferous and very hardy. Height 15 in. T. pkt. 40c.

HARDY PRIMULA JAPONICA

Very showy and very hardy. Sow the seed in January, place the flats outdoors, cover up with snow, shade with boards, take the boards off when the seed is up. Although a perfectly hardy perennial of vigorous growth, must be protected over winter by covering with straw or brush. The colors are shades of crimson, purple, lilac and carmine pink. Blooms in April and May. Height 18 in. **CHOICE MIXED**—T. pkt. 30c; 1/8 oz. 45c; oz. \$3.00.

PRIMULA FLORENDIAE—Flowers fragrant, large, bright lemon yellow in June-July, fine for cutting. Very valuable because a strong grower and very hardy. Height 3 ft. T. pkt. 40c.

PRIMULA OFFICINALIS COWSLIP. Bright yellow fragrant flowers in April and May. Very easily raised and very hardy. Does well in sun or shade withstanding prolonged dry spells. Height 10 in. T. pkt. 10c; 1/8 oz. 35c.

PRIMULA PULVERULENTA—Bartley strain. Large flowers in many colors, during May and June. Hardy. Height 3 ft. T. pkt. 40c; 1/32 oz. \$1.20.

PRIMULA ROSEA GRANDIFLORA—Blooms in April and May, flowers large, fiery carmine-pink very bright, very appealing. It will pay you to try this Primula for spring sales. Hardy. Height 8 in. T. pkt. 30c; 1/64 oz. 45c; 1/32 oz. 85c; 1/8 oz. \$2.00.

PRIMULA SIEBOLDI. An exceptionally hardy Primula from Siberia. The seed we offer was saved from selected large flowered specimens producing extra large flowers in umbells in many bright colors with a white eye. Contrary to the rule the seed germinates freely even when sown during spring or summer. Fine pot plant also for borders. Prefers shade. Blooms in May. Height 10 in.

PRIMULA VERIS GIGANTHEA

The flowers are of enormous size, way superior to the old strain, born on wiry and long stalks. The colors are yellow, pink and lilac, clear and attractive. Can be forced with ease and had during winter, when flowers are worth money. Try a batch of these wonderful primulas. They are a new thing and no doubt will prove a paying proposition. Height 1 ft. T. pkt. about 200 seeds 20c; 1/8 oz. 50c; oz. \$3.60.

PRIMULA VERIS MUNSTEAD

A magnificent strain, flowers of largest size, showing wonderful shades of yellow as well as purest white. Height 1 ft. T. pkt. 30c; 1/8 oz. \$1.00.

PRIMULA VERIS MIXED—(Primula Elatior, Polyanthus). Finest quality mixed. Height 1 ft. T. pkt. 15c; 1/8 oz. 35c; oz. \$2.40.

RICINUS—CASTOR BEAN

Easily raised from seed planted indoors in March or April; planted in small pots and set out 30 inches apart in rich ground when all danger of frost is past.

CAMBODGENSIS—Palm-like foliage, black-red in color. This variety is a poison to grasshoppers. Height 7 feet. T. pkt. 10c; oz. 20c; lb. \$1.40.

ZANZIBARIENS—The gigantic leaves, 2 feet and 1 foot across and the great size of the plant surpass any other known Ricinus. Mixed varieties with green, brown or purplish leaves. T. pkt. 5c; 1 oz. 15c; 1/2 lb. 40c; lb. \$1.60.

ZANZIBARIENS ENORMIS—Grows 15 to 20 feet high in one season and is the biggest of the Ricinus family. Foliage bright green. T. pkt. 10c; oz. 25c; 1/4 lb. 45c; 1 lb. \$1.80.

RICINUS SPECIAL MIXTURE—A well balanced mixture of choice and distinct varieties. T. pkt. 5c; oz. 20c; lb. \$2.00.

RUDBECKIA PURPUREA HYBRIDA

An improved Purpurea and really a first class, hardy perennial. The flowers are very large, single, daisy like carried on long stems, crimson in color. Height 4 ft. Blooms in July and August. T. pkt. 10c; 1/8 oz. 20c; oz. \$1.20.

RHODANTE

Everlasting annual bearing delicate flowers of great beauty from May to September. Splendid as a pot plant, for dry bouquets as well as a cut flower. Sow the seed in March and April in good sandy soil. When large enough to handle place 3 to 4 seedlings in a four inch pot. If you will try Rhodante you will find it a good pot plant easy to sell. Rhodante must be watered only when the water is really needed. Height 1 foot.

RHODANTE—SPECIAL MIXTURE—Contains all the best varieties, both single and double. T. pkt. 10c; 1/8 oz. 30c; oz. \$1.00.

ROCHEA FALCATA

A plant with thick, fleshy foliage and flame red flowers. One of the best pot and house plants as it will stand an immense amount of neglect. Requires rich soil with one-third of sharp sand mixed in. Tender perennial. Height 15 in.



Double Flowering Poppy

RANUNCULUS DOUBLE GIANTS

Large, double flowers in many colors, produced in May. Fine for cutting. Half hardy perennial. Divisions of clumps started in 2½ in. pots late in August, then planted 8x8 in., will produce bloom from middle of March on. Height 12 in. True Palestine strain.

Salpiglossis

An annual of great beauty. Seed sown in January under glass, will bloom in May. Sown in March outdoors directly to where the plants are to stand blooms from June to October. Sown in September will bloom in winter. The flowers are of velvety texture, intricately veined and pencilled with gold. First class for cutting. Salpiglossis does best in light soil. If your soil is heavy and stiff add some sharp sand or coal ashes. Height 2 ft.

SCARLET AND GOLD—Velvety scarlet flowers, with numerous golden veins. A great cut flower.

VIOLET AND GOLD—Velvety violet, veined with gold. A grand cut flower.

LIGHT BLUE AND GOLD—ROSE AND GOLD—VELVETY VIOLET.

CRIMSON—CRIMSON AND GOLD—Any color: T. pkt. 10c; ½ oz. 15c; oz. \$1.00.

EMPEROR MIXED—A magnificent strain with extra large richly colored flowers. All colors mixed. T. pkt. 10c; ½ oz. 15c; 1 oz. 80c.

SAINTPAULIA IONANTHEA GRFL.

Winter blooming pot plant, producing flowers six months after sowing and staying in bloom for months. The flowers resemble sweet violets, are larger in size, of deepest blue, set off by brilliant golden anthers. Use soil with sharp sand and never water overhead. Height 6 in.

SANTPAULIA I. CORDATA—Easily raised pot and bedding plant of strong upright growth, flowers deep lavender blue, produced 6 months from date of sowing. Height 6 in.

SANTPAULIA KEWENSIS—Flowers large shining blue, foliage bright green. Free bloomer.

CULTURE—Saintpaulia belongs to the same family of plants as Gloxinia and the culture is the same. However, when watering, the utmost care is required and is best done by immersing the pots or flats in luke warm water. The best time for starting the seed is from late in December to March.

SALVIA BEDDING QUEEN

An early flowering scarlet sage producing brilliant display by the end of June from seed started early in March. A very fine variety, both florets as well as the spikes are large and massive. Height 18 in.

SALVIA AZUREA GRANDIFLORA—A hardy perennial variety producing spikes of intense sky-blue flowers in great profusion. Height 2 to 3 feet. T. pkt. 10c; ½ oz. 20c; 1 oz. \$1.20; lb. \$18.00.

SALVIA PATENS—Splendid for bedding for all summer display. Flowers large rich blue. Half hardy perennial. The roots are easily wintered the same as canna bulbs. Height 2 ft. T. pkt. 25c; 1/16 oz. 45c.



Salvia or Scarlet Sage

All Salvias are easily grown from seed, sown indoors in March or April and set in permanent location in May. Require good soil. All bloom the first year from seed and are best treated as annuals. Plant 18 inches apart each way.

Seeds mostly of our own growing, always of strong germination. To get a good stand, sow in a bed filled with clayey soil that contains no manure and no vegetable matter. Do not use good rich soil. Use clean clayey soil in your flats also. Your plants will not damp off if you will set the seedlings at the time of transplanting at the same depth they stood before you lifted them. To prevent rot and damping off give your salvias plenty of air and sunshine. If your plants in flats get spindly or overgrown clip them; they will start new growth soon again and you will have the prettiest, bushy plants of even growth you ever saw.

The Farinacea variety is one of the finest blue flowers. The plants should be pinched back during their early stage of growth two or three times. This induces the plants to branch out from the base and results in erect spikes.

Many growers lose their seedlings of the Splendens type of Salvia, in transplanting. To avoid this loss keep your seedlings as thirsty as it is safe to do so. This will retard their growth, they will be tough by the time they will reach the height of 2 inches when it will be safe to transplant them from the seedbed into the flats.

SALVIA SPLENDENS—The plants grow 3 feet in height and are completely covered with scarlet flowers. T. pkt. 15c.

BONFIRE OR CLARA BEDMAN—Of compact growth forming oval bushes covered by flower spikes of brilliant scarlet, clear above the foliage. Brilliantly effective for bedding either planted alone or in front of other plants. Height 2 feet. T. pkt. 15c; ½ oz. 40c; oz. \$3.00.

ZURICH—Produces flowers in such great numbers that they cause the spikes to droop gracefully with their weight. The flowers are of a brilliant, dazzling scarlet, and borne in endless profusion all summer and fall. Height 2 feet. T. pkt. 15c.

AMERICA—A fine variety of compact, bushy growth, producing large, heavy spikes of fiery scarlet flowers. Height 18 inches. T. pkt. 15c.

FIREBALL—Robust growing variety, producing globular bushes, studded with dazzling scarlet spikes of bloom. Height 18 inches. T. pkt. 15c.

FARINACEA—A perennial variety producing tall spikes of silvery lavender blooms from a dense mass of foliage from June to November. In the North needs protection over winter. Height 3 ft. T. pkt. 10c; ½ oz. 20c; oz. \$1.00.

FARINACEA BLUE BEDDER—Plants of compact growth, flower spikes of attractive deep blue. Height 3 ft. T. pkt. 15c; ½ oz. 25c; oz. \$1.20.

SAXIFRAGA

LINGULATA LEICHTLINII—Produces early in spring, erect panicles of bright red flowers and masses of bold, long narrow, deep green foliage covered with "frost." A choice plant for the rockery, border or shrubbery. Hardy perennial. Easily raised. Height 30 inches.

SAXIFRAGA PERENNIAL MIXED—Many varieties, including broad leaved, mossy narrow and encrusted leaved sorts, both tall and dwarf growing. Once started from seed you may select your type of plant and propagate these by divisions.

MOSSY VARIETIES MIXED—These form moss-like cushions in many shades of green and do not grow over 4 inches tall.



SAXIFRAGA COTYLEDON

Flowers white in large panicles, irresistibly appealing to flower lovers during May and June. Fine pot and rock plant. Hardy perennial. Height 1 ft.

AS ROCK PLANTS, SAXIFRAGAS stand very high. They can be easily and quickly propagated by divisions. The plants sell fast. Easily raised from seed, thriving in any good soil in sun or shade. Perfectly hardy.

Schizanthus

A most desirable annual for pot and garden culture and one of the daintiest of cut flowers. Compact and bushy, lasting in bloom for months. A highly paying plant for florists. For spring trade sow in a cool house in October, pot off when large enough and shift as soon as needed. Schizanthus must never be allowed to become pot bound. For summer blooming sow when danger of frost is past, later transplant to stand a foot apart. Make several successive sowings.

If a crop of flowers is desired during December and January sow in September, allow the plants to bud in 4 in. pots, grow cool (48 deg. house). You will find it about the easiest flower to bring into bloom and the most readily saleable. To get bushy plants you must pinch and keep on pinching the plants.

SCHIZANTHUS HYBRIDUS

DR. BADGER'S IMPROVED GIANT FLOWERED HYBRIDS.

Large flowers, brilliant range of colors, from light pink through rose to deep purple, each flower with a large golden blotch. Contains no white flowers. Plants compact 12 to 14 in. tall. Very outstanding strain for the Florist. T. pkt. 15c; 1/8 oz. 30c; 1/4 oz. 55c; oz. \$4.00.

WISETONENSIS MIXED—Compact growing strain producing fine flowers in abundance and a first class plant. Height 15 inches. T. pkt. 10c; 1 oz. 60c.

SCHIZANTHUS DWARF GEM

Ideal for pots. Of compact growth, only 10 inches high. The range of colors is wide and the colors are bright and pronounced. MIXED. T. pkt. 20c; 1/4 oz. 30c.

SEMPERVIVUM MIXED

Our mixture contains the best hardy perennial varieties. Sempervivum or House Leeks, are interesting and attractive plants, forming rosettes of fleshy leaves in many colors such as, pinkish brown, silvery white, bluish green, etc. Flowers in red, yellow and white. Sempervivum will grow where nothing else would, on dry banks, on top of walls, they are excellent rock plants and indispensable in carpet bedding. Height 3 to 6 in.

SENECIO-JACOBEEA ELEGANS

DOUBLE MIXED—An annual, bearing very double flowers in large heads from June to October, excellent for cutting and as a bedding plant. The flowers are many colored, white, red, bronze, brown and shades rarely seen. Foliage feather-like, beautiful. Start the seed in March, plant out in May or sow outdoors in May. Height 2 ft. T. pkt. 10c; 1/4 oz. 30c.

SCABIOSA WEBBIANA—Plants of neat compact growth, flowers creamy white, produced in unbelievable quantities from June to October. Good for cutting and rockery. Hardy perennial. Height 20 inches. T. pkt. 15c.



Large Flowered Scabiosa

Scabiosa Mourning Bride

One of the handsomest summer border plants, producing in great profusion splendid double flowers for table bouquets, etc. They grow about 30 inches high and come into bloom early in July and continue in never-ceasing succession till frost. Hardy annual. The seed of annual varieties germinates in 2 to 3 weeks, the perennial from 3 to 6 weeks. Sow in a flat cover, the seed about half inch and apply water ONLY when needed to get a full stand and to avoid loss from damping off.

SCABIOSA GIANT LOVELINESS—Flowers very large on long stiff stems, color, shades of delicate salmon-rose.

CATTLEYA—Beautiful orchid shade of rich rosy lilac. Flowers of great size.

SALMON—Pure salmon.

AZURE FAIRY—Blue; BLACK PRINCE—Black Purple; CRIMSON—FIREBALL—Scarlet; YELLOW—SHASTA—Pure white, very large and double; PEACH BLOSSOM—Flesh pink, extra large and double; BLUE COCKADE, deeper blue than Azure Fairy.

MIXED. Any of the above: T. pkt. 10c; oz. 45c; lb. \$4.20.

SCABIOSA GIANT HYBRIDS

A new highly improved annual Scabiosa producing flowers of gigantic proportions in many colors. MIXED. T. pkt. 10c; oz. 80c.

PERENNIAL SCABIOSAS

CAUCASICA ISAAC HOUSE—Giant flowered hybrids in shades of blue and lavender fringed and ruffled. First rate cut flower in bloom from late in May to October. Long lived perennial. Height 30 in. Thoroughly cleaned and plump seed. T. pkt. 15c; 1/4 oz. 30c; oz. \$2.00; lb. \$22.00.

CAUCASICA ALBA—Pure white. T. pkt. 20c; 1/4 oz. 40c; oz. \$3.00.

JAPONICA—This is a perennial variety of great beauty and elegance. The beautiful artistic lavender blue flowers are borne on long wiry stems and are 2 to 3 inches across. Very floriferous. A fine cut flower. Height 3 ft. T. pkt. 10; oz. 45c.

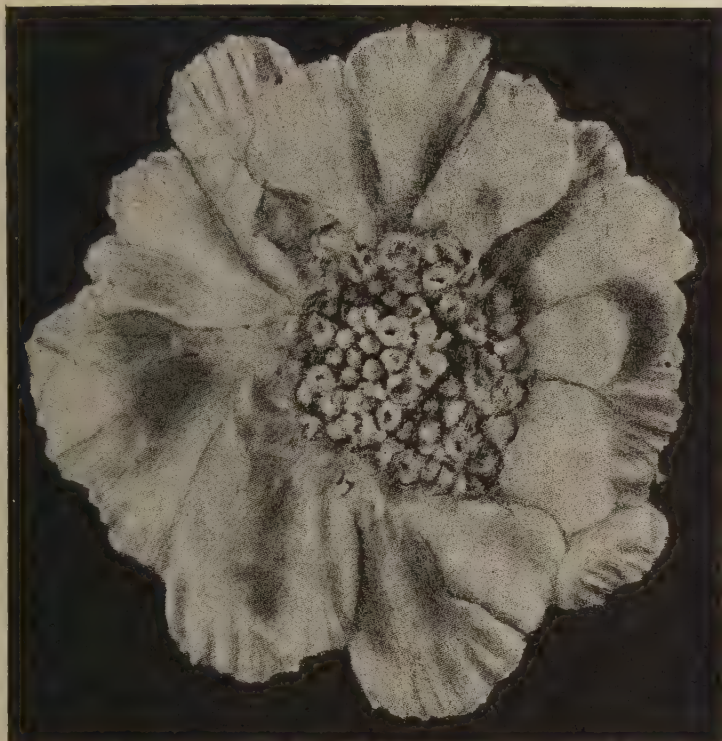
SCABIOSA COLUMBARIA—Hardy perennial but not hardy in Iowa. Flowers two inches across with short compact petals. Height 2 ft. In bloom May-June. Pink and lavender colors. MIXED. T. pkt. 15c; 1/4 oz. 30c; oz. \$2.00.

SCABIOSA FISCHERI

Hardy perennial of vigorous growth producing a sea of very dark bright blue, double flowers over an inch across during July and August. Fine for cutting and as a border plant. Height 3 1/2 ft. Different from S. Japonica. T. pkt. 15c; oz. 80c; lb. \$10.00.

SCABIOSA SPECIOSA

Hardy perennial of compact bushy growth, producing quantities of bright mauve double flowers two inches across, on long stiff stems throughout summer. Fine for permanent beds and borders and first class cut-flowers. Height 2 feet. T. pkt. 15c; 1/4 oz. 30c.



SCABIOSA GOLDINGENSIS

Caucasica type, flowers very large, beautifully frilled of bright deep lavender on long stiff stems from June to September. Perfectly hardy. Height 3 ft. T. pkt. 25c; 1/16 oz. 35c; 1/2 oz. 60c; oz. \$4.00.

SHAMROCK

What we offer is a plant identical in growth with White Dutch Clover but there is a great difference, namely that our Shamrock has mahogany brown and wine-red foliage, is very conspicuous and a plant that sells fast if placed in pots and offered for sale in the spring. T. pkt. 15c; 1/2 oz. 40c.

SIDALCEA ROSY GEM

Hardy perennial plant with handsome spikes of pink flowers in June and July. Needs winter protection. T. pkt. 10c; 1/2 oz. 25c; oz. \$1.80.

SILENE

SILENE ORIENTAL SPLENDENS—A splendid hardy perennial fine for cutting or for the hardy border bearing fine large bright rosy pink flowers with a delicious perfume from June to September. Height 18 in. Easy to raise from seed. Space the plants 2 feet apart. **SILENE ALPESTRIS**—Hardy perennial rock plant of dwarf compact growth, a model of elegance in or out of bloom. Flowers in sheets of glistening white from May to July, therefore a plant that will show the grower a profit and that will sell in quantities. Height 6 in. T. pkt. 15c; 1/16 oz. 30c; 1/2 oz. 55c; oz. \$4.00.

SILENE ROSE QUEEN

Of similar usefulness as Sweet Alyssum, producing a sheet of brilliant bloom early in the spring. The color of Rose Queen Silene is glowing deep pink. The flowers are double. Highly priced in Europe. Will be admired here if given trial. Annual. Height 4 in. T. pkt. 15c; oz. \$3.00.

SINNINGIA—See Gloxinia Regina.

SMILAX—CLIMBER

A graceful, tuberous rooted, perennial climber, none surpassing it for its glossy deep green most delicate foliage. Fine for vases and baskets. Sow from December to March, soak the seed 24 hours before sowing.

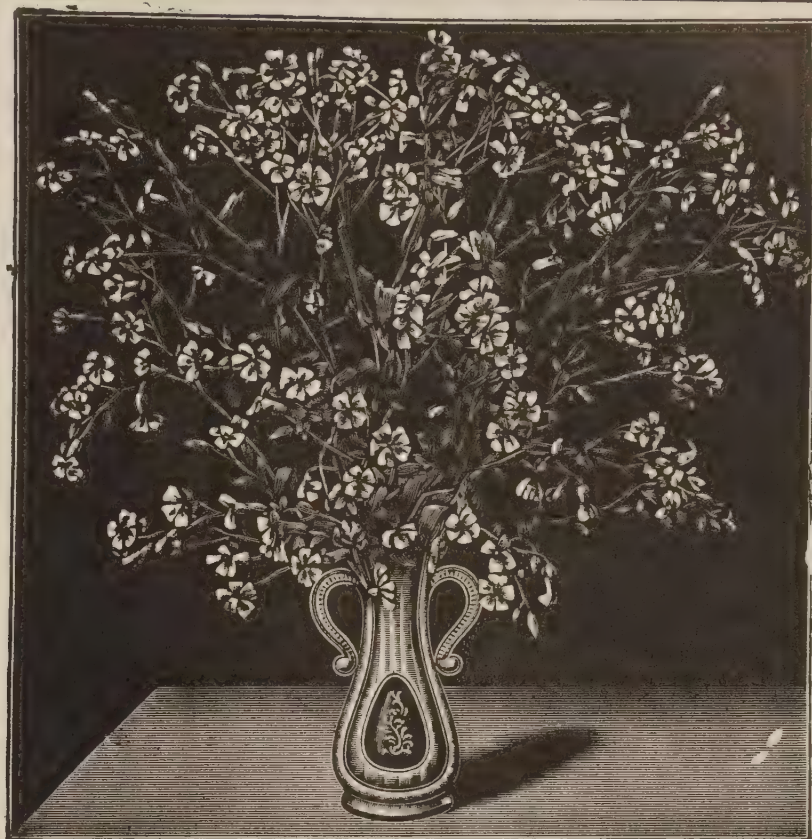
SMILAX—For best returns grow in a night temperature of 60 to 65 degrees. Allow from 3 to 6 weeks for the seed to germinate. Height n to 10 feet. T. pkt. 15c; oz. 80c; lb. \$7.00.

SPIREA JAPONICA—See Astilbe.

SPERGULA PILIFERA AUREA—SAGINA

Hardy perennial only two inches high, flowers rich orange yellow. Fine for neat beautiful flowering lawns, for edgings and rockeries. Does well in any kind of soil in full sun. Seed very fine but sprouts readily. The best time to start the seed is from March to July. Sow in a flat filled with thoroughly moistened dirt and press the seed to the dirt. Do not cover with dirt at all. Lay a piece of paper on top of the flat, remove when seed starts to sprout which is in from 8 to 15 days from date of sowing. Same as Sagina Subulata.

CONSULT the front page of this catalog for novelties and specialties.



SAPONARIA VACCARIA

An annual producing masses of graceful sprays of glistening satiny flowers, resembling an enlarged gypsophyla. Very popular in European flower markets and sure to become popular on this side. Treat like you do Gypsophyla Elegans. PINK—WHITE—MIXED. T. pkt. 10c; 1 oz. 45c, prepaid.

SAPONARIA OCYMOIDES—Hardy, perennial, creeping plant of dense growth, less than a foot high, covered with a sheet of brilliant bloom from May to August. Unsurpassed for covering banks and in rock work. CRIMSON. T. pkt. 10c; 1/2 oz. 15c; oz. 80c; lb. \$8.00.

SPIREA ULMARIA—Hardy perennial, flowers creamy white in large terminal heads on long stout stalks during June and July. First class cut flower. Genuinely beautiful, perfectly hardy, long-lived, drought and heat resisting, a real gem greatly deserving to be a favorite with flower lovers as well as professionals. Height 3 ft. T. pkt. 10c; 1/2 oz. 15c.

STEPHANOPHYSUM—JUSTICIA

LONGIFOLIUM—An elegant house plant, easy to raise from seed and blooming during winter under glass or in the house. The flowers are in clusters and in great numbers, of the most brilliant vermilion red. Blooms 12 months from date of sowing. Cut back after thorough blooming, furnishes flowers summer and winter. Half hardy perennial. Height 1 1/2 ft. The seed lays 3-4 weeks before it germinates.

STEVIA

Stevias furnish the florist from November till March, quantities of graceful sprays; unexcelled for bouquets and design work. Grows readily from seed. Grow them outside over summer giving them 2 feet each way, pot off early in the fall and keep over winter in a temperature of 40 to 50 degrees. Any soil is good for them but they will not stand the slightest frost.

STEVIA SERRATA ALBA—White. Height 30 in. T. pkt. 25c.

STIPA PENNATA

FEATHER GRASS—Bears long panicles of very feathery appearance much used in dry bouquets, from June to September. Height 3 feet. T. pkt. 10c; 1/2 oz. 35c.

SNAPDRAGON—See Antirrhinum.

STOKESIA—CORNFLOWER ASTER

A magnificent hardy perennial The flowers, measuring 4 to 5 inches across, are produced on stiff, long stems, making an excellent plant for cut flowers, for bouquets, etc. Here in Iowa it winterkills but it is so easy of culture and produces such handsome flowers it is really worth while growing as an annual. Plant 9 inches apart. Height 2 feet. In bloom from August to October.

BLUE—Lavender blue. **WHITE**—Blush white. **MIXED**. Any color.

SOLANUM—JERUSALEM CHERRY

Of dwarf branching habit, with shiny small oval shaped leaves loaded with bright scarlet cherry like fruits. Fine pot plant easily raised from seed. Height 1 ft. T. pkt. 10c; oz. 45c.



Double Sunflower

SUNFLOWER—HELIANTHUS

The tall growing varieties should always be planted in groups to make a background for dwarfier plants. All Sunflowers are gross feeders and require rich soil and full exposure to the sun. They bloom from early summer till frost and are excellent cut flowers. Plant seed in the open in April and May. Annuals.

CHRYSANTHEMUM FLOWERED DOUBLE—Light yellow, very large and double, with feathered petals resembling somewhat the double Chrysanthemum of the florist. Height 3 feet. T. pkt. 10c; oz. 45c; lb. \$3.00.

CUCUMERIFOLIUS MINIATURE DOUBLE—The flowers are small, extremely double with a brown colored center, very handsome. The plant produces hundreds of blooms which are first class as cut flowers. Height 5 ft. T. pkt. 10c; oz. 45c; lb. \$3.00.

SPECIAL MIXTURE—Embraces all the choice Sunflowers, both double and single. T. pkt. 10c; oz. 45c; lb. \$3.00.

STACHYS LANATA

Hardy perennial with ornamental woolly and thick silvery white foliage in dense tufts. Splendid for bedding and borders. A long lived perennial if planted in full sun and well drained position. Height when in bloom 2 ft. Height of leaves 8 inches. Flowers dark rose pink. T. pkt. 10c.

STRAWFLOWERS—SPECIAL MIXTURE

This mixture contains every variety of strawflower that is worth growing and in all colors. T. pkt. 10c; oz. 60c; lb. \$5.00.

STRELITZIA REGINAE BIRD OF PARADISE

The leaves of this plant are paddle shaped, foot long, deep green, stiff and shiny, borne on upright stalks twice the length of the leaves, the flowers of most peculiar and striking form, orange and blue in color. Unexcelled as a specimen in lawn, as a pot plant, and whenever the unusual, beautiful and strongly effective is wanted. Vigorous grower, easily raised from seed, will stand much neglect but given strong soil, plenty of water and placed in full sunlight it will prove to be a plant that will be much talked about by all who see it. Grow rather cool, 50 degrees at night is sufficient. Tender perennial 3½ ft. tall. Start the seed in pans or flat in light sandy soil, cover the seed only about quarter of an inch with dirt, keep in a temperature of 85 to 90 degrees. The seed germinates unevenly in from 6 to 8 weeks after sowing. Before sowing place the seed in a container and pour on it boiling hot water. Take the seed out after 24 hours and sow immediately. This must be done because the seed has an extremely hard shell and unless treated with hot water will not germinate. The seed germinates in 6 to 8 weeks from date of sowing and must be started in heat. 4 seeds 50c; 10 seeds \$1.10.



Statice Latifolia

STATICE—Sow the seed of annual varieties from January to May, also in the Fall if located South. The seed germinates 2-3 weeks after sowing. Do not divide the clusters of seed, sow in flats, transplant when the plants are large enough. The seed of perennial Statice lays 4 to 6 weeks before it germinates and the seed must be covered very lightly, just enough to hide it from view. If covered more it will not "grow" at all. Can be sown at any time including late in the fall. All Statice love the sun and well drained soil. For drying cut when in full bloom. All are highly valuable florists' material, fresh or dried.

ANNUAL STATICE

SINNUATA—A most useful annual variety growing from 2 to 3 feet tall and producing brightly colored flowers that retain their lively color when dried. Really a splendid flower for bouquets, both fresh or dried.

KAMPF'S BLUE—LAVENDER—DEEP PINK—(Rosea Superba)—MIXED. Any color: T. pkt. 5c; oz. 20c; lb. \$2.00.

STATICE MARKET GROWERS BLUE—Annual Sinnuata. Vigorous grower, free flowering, flowers extra large of deepest blue on long spikes. T. pkt. 10c; oz. 25c; lb. \$2.00.

STATICE SNOW QUEEN—(Sinnuata). Flowers very large snow-white, the finest white statice now in existence. T. pkt. 10c; oz. 25c; lb. \$2.00.

STATICE SINNUATA will bring better returns if you will grow the improved varieties namely, Market Growers Blue, Snow Queen, Rosea Superba.

SUWOROWI—Produces long branched spikes of light rose flowers shaded with crimson. Easily raised annual. Height 2 feet. For a winter crop Suworowi is sown under glass in the late fall. Sown in February, later transferred to cold frames, will give a crop the last of May. T. pkt. 10c; oz. 80c; lb. \$12.00.

STATICE BONDUELLI—Fine for bouquets and indispensable for dry bouquets and wreaths. Flowers large, clustered at the end of stalks, of golden yellow color. Plant outdoors when danger of frost is past. Annual. Height 18 in. T. pkt. 10c; oz. 45c; lb. \$4.00.

PERENNIAL STATICE

STATICE LATIFOLIA is a handsome perennial plant of easy culture, growing about 2 feet high. Planted in deep soil and left undisturbed will produce graceful, deep blue flowers for many years. Blooms from June to August. Cut it when in full bloom, about 20 stalks to a bunch, hang up and let dry. When perfectly dry, close the tops of the bunches tightly together and wrap up in paper to keep the dust off and store away. When ready to use it, sprinkle the bunches before unwrapping. T. pkt. 10c; oz. 80c; lb. \$7.20.

PLANTS—Strong two year old field grown \$1.20 per doz., \$8.00 per 100, not prepaid.

STATICE CASPIA—Perennial variety producing graceful sprays of lavender and white flowers valuable both as fresh cut flowers or dried. Also called "Baby Statice." T. pkt. 15c; 1/16 oz. 25c; ¼ oz. 45c; oz. \$3.00.

STATICE SAREPTANA Like Incana in growth with florets like Latifolia but three times as large, intensely dark, bright blue in color. Very effective when dried as it retains its fine blue color for a long time. Easily raised from seed. Absolutely hardy. Height 2 ft. T. pkt. 10c; oz. 80c; lb. \$8.00.

STATICE DUMOSA—Hardy perennial variety furnishing first class material as filler in floral work, both fresh and dried. T. pkt. 15c; oz. 80c; lb. \$8.00.

PRIMULA OBCONICA will stand light frost, furnishes quantities of bloom during winter over a long period of time, is a high class cut flower and an excellent house plant. Can be started at any time. Produces bloom in 4 to 5 months from date of sowing. During summer place the plants in partial shade. Properly taken care of the plants will last for several years.

Winter Sweet Peas

Summer Sweet Peas

Our list of Early Flowering Sweet Peas is short for the very important reason that we list ONLY the very best variety in each color. Although short our list covers every known color.

AMERICAN BEAUTY—The best rich crimson-rose.
BALL ROSE IMPROVED—Largest and best cerise-pink.
BOY BLUE—Best and largest dark blue.
BURPEE'S ORANGE—The best clear orange.
BURPEE'S SALMON—Best light salmon.
BRIDESMAID—Best deep silvery pink.
BRIGHT LIGHT—The best flaming scarlet.
EILEEN—Rich rose salmon.
ELK PURPLE—Best purple.
FRAGRANCE—Best clear lavender self.
HOPE—The best black seeded pure white.
HORTUS QUEEN—Heavy producer of bright rose, ruffled and large flowers borne on heavy stems.
JEANNE MAMITCH—Striking rich rose pink, good shipper, very long stems.
LADY GAY—The best soft pink or blush pink.
LADDIE IMPROVED—Best rich rose-pink.
MRS. C. COOLIDGE—The best rich salmon-pink.
MRS. H. HOOVER—The best deep clear blue.
MARINER—Best clear marine blue. (Mid-blue).
MEMORY—Best clear rosy lavender. Wavy flowers.
ORANGE KING—Glowing intense deep orange. The best deep orange.
ORIENTAL—Best deep cream. Black seeded.
PRINCESS BLUE—Best light lavender blue.
PRIDE—Best, pure, deep, even cerise.
PEACHES—Best deep cream. (Bright apricot-rose).
PERFECTION—Best carmine-rose.
RED CROSS—Best deep crimson-scarlet.
RHUMBA—Large, deeply duplexed, very prolific glistening golden cerise.
SEQUOIA—Extra large salmon rose.
SILVER KING—Best light blue.
SPARKS—Large, frilled sunproof sparkling orange-scarlet.
SUNBAY—Best pure cerise.
SUNPROOF ORANGE—Bright crimson orange holding its color from bud stage until the aged flower reveals the seed pod. Stems long and strong. At present the best in this color.
SUPREME ORANGE—The best cerise-orange.
STERLING—Duplexed salmon rose, throws "fives."
SWEET BRIAR—Large rose pink.
TREASURE ISLAND—Golden orange.
TAHOE—Clear dark blue self.
TITANIA—Mammoth flowered, heavy stemmed, very bright deep rose self.
TOPS—Produces 5 to 8 sparkling, beautifully duplexed flowers to the stem. Tops in "rose."
TRIUMPH—Best lilac mauve.
WHITE CHAMPION—Best white seeded pure white.
ZVOLANER'S SALMON—Best cerise salmon.
ZVOLANER'S ROSE—Displaced by the variety Laddie.
WINTER FLOWERING MIXED—Perfect blend of colors, light Florists' shades predominating.
PRICE: Any variety: Oz. 35c; lb. \$4.00; 1/2 oz. 20c.
 An oz. of seed contains 370 to 420 peas.

NEW CLASS OF SWEET PEAS

Differs from the regulars in being of exceptionally strong growth producing flowers over a long period of time. Recommended for mid-winter sowing for a crop that will come early in April. To this class belong the following listed by us: Bridesmaid, Eileen, Fragrance, Sequoia, Sterling, Sweet Briar, Tahoe, Tops and Treasure Island.

HARDY PERENNIAL SWEET PEAS also called Everlasting Peas are high class for any kind of flower work. Listed under the name "Lathyrus latifolius" on page 80.

TEOLLUS seed must go through frost before it will germinate. T. Ledebouri being an exception. The best time to sow is late in the fall just before the ground freezes up hard.

STAR OF TEXAS

(Xanthisma Texanum). Plants neat and bushy producing quantities of bright canary-yellow daisies with pointed petals on wiry stems throughout the summer. Heat and drought resisting annual 18 in. tall. T. pkt. 15c.

EARLY IN NOVEMBER just before the time when heavy frosts are due, you can sow the seed of perennials outdoors. The seed will lay unsprouted till spring and will germinate very easily in the spring, long before the ground is ready to work. You will get better plants that way, bloom sooner and save yourself lots of watering.

Mr. Geo. O. Lee, a florist in Ontario, Canada, says: The seeds we received from you were more than I expected, the germination the best I have ever had—wonderful crops and true to name. Shirley Temple Glads I have tried three seasons to bloom with no luck. But your bulbs produced beautiful spikes.

Our list of Summer or Late Flowering Spencer Sweet Peas represents the best there is in this class of Peas. Because we list only the best variety in each color, our list is not as long as some.

ADMIRAL (THE)—Best dark violet-blue.
AMBITION—Best rosy-lavender.
BEAUTY—Best blush-pink.
BLACK DIAMOND—Best dark maroon.
BONNIE BRIAR—Sparkling rose pink of immense size. Best rose pink.
CAPRI—Best light blue.
CAPTAIN BLOOD—Best brilliant crimson-scarlet.
CHIEFTAIN—Best pure mauve.
DEBBY DAY—Best deep crimson.
EOSTASY—Best deep blush-pink.
EXCELSIOR—Best orange-scarlet.
FLAGSHIP—Best deep navy blue. (Ultramarine blue).
FLORA—Best clear deep lavender self.
FLORADALE—Best deep cream-pink.
FORTUNE—Best navy blue.
GLOAMING—Best light salmon pink.
GOLDEN DRAGON—Very large duplexed vivid orange rose.
GOLD OREST—Best salmon.
GOLDEN WINGS—Best pure orange.
HIGHLANDER—Best clear lavender.
JUMBO—Best deep cerise.
MAYTIME—Best golden cerise. Very rich color.
MELODY—Best apricot-pink.
OLYMPIA—Best purple.
PRINCE OF ORANGE—Best deep orange.
PINK FRILLS—Best deep salmon-pink.
PINKIE—Large deep rose pink.
REFLECTION—Best clear mid-blue.
RUFFLED BEAUTY—Best light cream-pink.
RUFFLED BLUE—Bright clear blue.
RUFFLED CRIMSON—Rich velvety crimson.
RUFFLED CARMINE—Best rose-carmine.
RUFFLED ROSE—Best rich rose.
RUFFLED WHITE—White seeded.
RUFFLED MAUVE—Satiny mauve, very fine.
RUFFLED BONNIE RUFFLES—Delicate salmon on cream.
RUFFLED SPARKLE—Glowing cerise.
RUFFLED ROYAL RUFFLES—Brilliant scarlet-cerise.
RUFFLED MIXED—All colors.
SNOW WHITE—Giant flowered pure white. Best white.
SWEET AFTON—Best large flowered deep silvery pink.
WELCOME—Best dazzling scarlet.
WHAT JOY—Best deep rich cream.
WINDSOR BLUE—Best clear mid-blue.
YOUTH—Best picotee. Rose on white ground.
ANY OF THE ABOVE: T. pkt. 10c; oz. 20c; lb. \$2.20.
SUMMER FLOWERING SPENCER PEAS in choicest mixture. T. pkt. 10c; oz. 20c; lb. \$2.20.

RUFFLED OR DOUBLE—Sweet Peas are listed by us in the general offer. This class represents an immense advance and growers will find growing these double sweet peas profitable. The frilliness and duplexness of the flowers that are carried on long, strong stems, 4 to 5 per stem, imparts a double appearance to the flowers. Greatly admired by all flower lovers. Try. If you will you will be well repaid. The seed costs no more than the seed of other Sweet Peas.

SWEET PEAS UNDER GLASS Good drainage, the soil worked 18 in. deep or deeper, enriched with 30% of rotted cow manure and tramping down the soil FIRMLY is the key of success. Also 6 to 8 ft. of headroom.

Soak the soil thoroughly before sowing. Few days after that, when the soil is only moderately moist sow in rows running north and south and cover the seed 2 inches deep. Sow in shallow trenches 2-3 in. deep, fill up these trenches with dirt about 45 days after planting. NEVER sow in wet or loose soil. Have the rows 15-18 in. apart. Start watering only when the seeds are half inch out of the soil then water only about once a week soaking the soil thoroughly. Thin out to at least 6 in. apart in the rows. When the plants begin to bloom use liquid cow manure once a week. Keep the soil stirred, do not allow any crust to form. In the fall when the weather is cloudy some of the buds will be dropping. To minimize this trouble keep the house on the dry side, STOP WATERING and wait 'till the top soil is dry 3-5 in. deep, then pour water in trenches from underneath. Ventilate all you can but avoid drafts. Draft is fatal to all greenhouse crops. Sow in September to get a heavy crop of blooms for Christmas. Always soak the seed for 6-10 hours, use only swelled seed and chip or file seeds that did not swell up, drop them back into water, sow when they are swelled up. **SWEET PEAS OUTDOORS**—About the middle of March place 6 seeds in a 4 in. pot, thin out later, leaving only 3 strongest plants. Place pots in cold frame, field plant early in May, do not allow your plants to suffer from lack of moisture, mulch when hot weather sets in, have the plants 10-15 inches apart in the rows. Remove all poor flowers promptly.

Do not allow the plants to go to seed. If you will the plants will stop blooming.



Double 10 Weeks Stocks

Florists' Stocks

For a crop of flowers for Decoration Day, sow early in February, transplant in the bench in March, set the plants 4 inches apart if you intend to grow the single spike or 10 inches apart if you rub out the terminal flower as soon as formed and force the plant to branch out. The branched plants will give 8 to 10 spikes that will make up well in bouquets and sprays, those with single spikes one only, but this very handsome and large. For best results sow the seed thinly and avoid stiff soil or soil containing imperfectly decayed manure, cover with clean sand about $\frac{1}{4}$ inch and water only when the soil is dry and always in the early part of the day. For bedding purposes sow the seed in February or early in March and transplant once or twice to get nice bushy plants. Plant on a cloudy day or shade the plants the first day as they are apt to wilt when first set out. In beds stocks should stand a foot apart.

HOW TO TELL in raising stocks what seedlings will bear double flowers. When the largest seedlings are about 3 inches high choose only those that are only 2 inches high or less, whose leaves have wavy edges. Eventually all the plants will have waviness but the double-flowered ones wave first.

Non-Branching Column Stock

Ideal for forcing, can be planted close together in the bench, producing spikes 30-36 inches long with fully double close-spaced florets. Of same season as Bismarck stocks. Sow the seed late in August for a crop of flowers in December to March.

AMERICAN BEAUTY, deep brilliant carmine rose. **BALL BLUE**, dark lilac blue. **BALL PINK**, clear light rose pink, white center. **BRILLIANT ROSE**, dark blue or purple. **MALMAISON PINK**, beautiful light pink. **MOONLIGHT**, fine canary yellow. **ROSE PINK**, clear rose pink. **RUBY** or **ILLUSION**, deep crimson. **SILVERY LILAC**, bright lavender, the most popular. **SNOWPEAK**, pure white to the end. **WHITE**, white suffused pink. **MIXED**. PRICE the same for all: 250 seeds 30c; 500 seeds 50c; 1,000 seeds \$1.00; 5,000 seeds \$4.50.

STOCK GIANT COLUMN GARDENIA—Individual florets two inches or over in diameter, the purest snow white, the spikes superbly formed 12-15 inches long, 4 inches through on a stalk 3 feet in length. Of robust habit, high percentage of doubles. In a class by itself with no peer among the finer florists flowers. 250 seeds 50c; 500 seeds 90c; 1,000 seeds \$1.75.

GIANT IMPERIAL BISMARCK

IMPROVED BISMARCK—The best stock for close planting. Of branching habit, flowers large on long stems. Very early blooming producing a high percentage of double flowers. Height 30 in.

ANTIQUE COPPER, lustrous red overlaid with copper. **GOLDEN ROSE**, light rose pink. **ELK'S PRIDE**, royal purple. **WHITE**. **ROSE**, deep rose. **LAVENDER**, clear rich lavender. **CHAMOIS**, creamy white, tinged with rose. **GOLDEN BALL**, rich canary yellow. **RED**, fiery red. **DARK BLUE**. **ROYAL PURPLE**. **MIXED**. Any color: T. pkt. 15c; $\frac{1}{8}$ oz. 45c; 1/16 oz. 25c; oz. \$3.00.

LARGE DOUBLE TEN WEEKS

Best bedding variety, plants well branched, foot high, in bloom from May to September. **SNOW-WHITE**, **BRILLIANT ROSE**, **BLOOD RED**, **DARK BLUE**, **FLESH PINK**, **PORCELAIN BLUE**, **MIXED**. Any color: T. pkt. 10c; $\frac{1}{8}$ oz. 25c; oz. \$1.80; lb. \$22.00.

GIANT PERFECTION STOCKS

Early flowering variety. Also known under the following names: Double Perpetual Branching, Dresden Stock and Cut and Come Again. The plants are of fine symmetrical habit, bushy and about 2 feet in height. The numerous side branches each carry a tall strong spike well furnished with unusually large and very double highly fragrant flowers. Unsurpassed as a cut flower. **BRILLIANT**—Dark red; **CREOLE**—Canary yellow; **LA FRANCE**—Rose; **MAY QUEEN**—Lilac; **PRINCESS ALICE**—White; **SAPPHIRE**—Deep blue; **SILVERY LILAC**, **FLESH** deep flesh pink; **HEATHAM BEAUTY**—rich terra cotta rose; **MIXED**—Many brilliant colors. Any of the above: T. pkt. 15c; $\frac{1}{8}$ oz. 30c; 1 oz. \$1.80.

GIANT BEAUTY OF NICE

Early flowering winter stock producing flowers in great profusion on plants over two feet high. Large percentage of these are perfectly double and all are powerfully fragrant. Sow seeds of these for winter blooming in August and September. If intended to bloom outdoors sow the seed in March. **BRILLIANT CRIMSON**, **BLOOD RED**, **LILAC**, **LIGHT BLUE**, **DARK BLUE**, **DARK VIOLET**, **DELICATE PINK**, **OLD ROSE**, **SNOW-WHITE**, **CARMINE ROSE**, **MIXED**. Any color: T. pkt. 15c; $\frac{1}{8}$ oz. 30c; 1 oz. \$2.00; 1 lb. \$24.00.



SWEET WILLIAM—Dianthus Barbatulus

PERFECTION MIXTURE—Contains the finest extra large flowering single varieties, such as Holborn Glory, Auricula Flowered, etc., and will produce magnificent flowers of the most beautiful shades and markings. Oz. 50c; lb. \$6.00; T. pkt. 10c.

OCULATUS MARGINATUS—Large flowered variety, the individual blooms having a large white eye encircled by well defined zone of red, blue, etc., very beautiful. T. pkt. 10c; oz. 45c; lb. \$6.00.

PINK BEAUTY—Large flowers of satiny pink color. T. pkt. 15c; $\frac{1}{8}$ oz. 35c; 1 oz. \$2.00.

SCARLET BEAUTY—The flowers are of an intense scarlet in large trusses. T. pkt. 10c; oz. \$1.20.

BLACK PRINCESS—Blackish crimson with satiny sheen, a color that appeals to all lovers of flowers. T. pkt. 10c; oz. 45c; lb. \$6.00.

DOUBLE MIXED—T. pkt. 15c; oz. 80c; lb. \$10.00.

DWARF DOUBLE SWEET WILLIAM

Plants only 8 inches tall, of pyramidal growth and a solid mass of bloom from the ground up to the tips of the plants in many colors during May, June and July. In manner of growth entirely different from the regular Sweet William. Of all the flowers that we raise for seed in our gardens, Sweet William is admired greatly by every visitor. If you are a plant grower looking for something that can be moved in quantity on the market, try Double Dwarf Sweet William. **MIXED**. T. pkt. 15c; $\frac{1}{8}$ oz. 20c; oz. \$1.20.

ANNUAL SINGLE MIXED—Seed sown in February will produce blooming plants in May. Of value for spring sales. Flowers large in many colors. Height 12 in. T. pkt. 10c; oz. 60c; lb. \$6.00.

CONSULT the front page of this catalog for novelties and specialties.

STREPTOCARPUS HYBRIDUS

STREPTOCARPUS—Winter blooming greenhouse plant. Flowers large, trumpet shaped in shades of violet, pink rose down to pure white. What we offer is seed saved from the finest, large flowered hybrids, the best money can buy. Treat same as Gloxinia. Seed very fine. Height 1 ft.

SWAINSONIA GRANDIFLORA

An elegant plant with large white, pink and red flowers and delicate bright green foliage, excellent for bouquets, as a green, in basket and design work, for high class wreaths and sprays and as a substitute for Valley in brides bouquets. Readily started from seed. Grow in a 50 deg. house, give rich soil and plenty of sun. The flowers resemble somewhat sweet peas, the plants are in bloom almost every day in the year if kept in a large pot or tub so as to restrict them as to root room. Once you try Swainsonia you will not be without it. Tender perennial. Height 3 feet. T. pkt. 25c.

SWEET VIOLET QUEEN CHARLOTTE

SWEET VIOLET—Viola Odorata. Blue hardy English violet, sweetly scented. Violet requires rich, well drained, somewhat sandy soil and should never suffer from lack of moisture. Plant seed in fall or spring. Of all violets, Queen Charlotte is the hardest—does not winter-kill even in Iowa. Blooms in the spring and again in the fall. Seed lays long before it sprouts. T. pkt. 10c.

PLANTS—Three for 50 cents, prepaid.

THALICRUM

THALICRUM DIPTEROCARPUM—Flowers rosy purple in June and July. Beautiful cut-flower. Height 3 ft. T. pkt. 15c.

DIPTEROCARPUM ALBUM—Beautiful foamy flowers, pure white. Height 3 ft. T. pkt. 20c.

Thalicrum is an absolutely hardy and long lived perennial of vigorous growth, doing well in rich soil and full sun, withstanding most severe hot and dry weather. The foliage of all Thalicrum is a first class material for bouquets and baskets. Sow the seed in the spring or fall, space the plant foot apart each way.

THALICRUM PURPUREUM—Produces in June and July large beautiful plummy flowers of bright lavender pink. Height 4 ft. T. pkt. 15c; 1/16 oz. 35c.

THUNBERGIA ALATA—Black Eyed Susan

A fine climber with ornamental leaves and attractive blooms ranging from white to deep orange from May to August. Much used for hanging baskets. Sow in January to February under glass. Tender. Height, 6 to 8 ft. Mixed. T. pkt. 15c; oz. 50c; lb. \$7.00.

THYMUS SERPYLLUM

Mother of Thyme, Wild Thyme or Mountain Thyme. A rapid growing, creeping plant, absolutely hardy, unexcelled for covering bare spots, as an edging plant and for rockeries. Blooms in June and July, filling the air with a most pleasant and delicate fragrance. T. pkt. 15c; 1/16 oz. 35c.

THYMUS SERPYLLUM RED (Coccineum)—Flowers bright red, while the flowers of Serpyllum are pale pink. Either variety has strongly perfumed foliage, both are of neat dense growth not over 2 inches tall, ideal as ground cover.

TORENIA FOURNIERI

FOURNIERI GRANDIFLORA—A charming dwarf-growing annual with blooms in which deep and sky blue as well as golden yellow is blended in a charming fashion, and thriving under the hardest of conditions. Will do well in rich soil as well as in dry sand, along with cacti or in moist and shady places, and is invaluable for the South, where it is used in the same way as pansies in the North. Makes a great plant for hanging baskets or window boxes, also fine as pot plant and for bedding. Very floriferous, keeping in good leaf and flowers from spring to frost. Of easiest culture. Sow the seed in January and February and when all danger of frost is past set outdoors 8 inches apart. It forms neat rounded bushes. Height 1 ft. T. pkt. 15c; 1/16 oz. 30c; 1/8 oz. 55c; oz. \$4.00.

TORENIA THE BRIDE—Of same usefulness and habit as Fournieri Grf. Flowers very large, white overlaid with pink. T. pkt. 20c; 1/32 oz. 30c; 1/16 oz. 50c.

TRITOMA—FLAME FLOWER

Sow in February or March, line out in May, lift before frost, store buried in sand in a cool cellar, set out in May. Blooms from July to October. The roots are fleshy and keep well in storage. Hardy south of Kansas City. Height 3 ft.

TRITOMA SPECIAL MIXTURE—Composed of choice early flowering varieties. Our mixture will produce elegant flowers in shades of orange, yellow, rose and salmon pink and some crimson flowers if the seed is sown early. Hardy perennial but some protection over winter can do no harm. Average height 3 ft. T. pkt. 20c; 1/32 oz. 30c; 1/8 oz. 50c; oz. \$3.60.

TRICHOLAENA ROSEA

Of all ornamental grasses suitable as fillers in bouquets Tricholaena is the prettiest. Grows 2 ft. tall, produces an abundance of downy plumes of pale silvery pink, dainty and striking in a bouquet of pink roses or other flowers where pink predominates. Annual.

TAHOKA DAISY Valuable cut flower, easily raised. Flowers daisy-like, 2 inches or more across, pure blue-lavender fading to rose with golden yellow centers that stay yellow, on good long stems, from mid-June until late autumn. Heat and drought resisting plant. Plants compact, bushy, 20 inches tall. Annual. T. pkt. 20c; 1/8 oz. 30c; oz. \$2.00.



TAGETES LITTLE GIANT

Plants very compact, only 4-6 inches high, dense fernlike foliage, flowers dainty single bright golden orange touching one another and as many as 200 blooms on a single plant that has a spread of 8-10 inches. A veritable floral cushion of striking effect when used for edgings. T. pkt. 10c; 1/8 oz. 20c; oz. \$1.20.

TROLLIUS HYBRIDUS MIXED

Perfectly hardy, free flowering perennial, producing giant ball shaped flowers resembling tulip, from May until August. A valuable cut flower. Succeeds in rather light soil and in a half shady position. The seed we offer is from a collection of new large flowered hybrids in all shades of yellow with a percentage of double flowers. Divisions of clumps placed in 2 1/2 in. pots late in August, then planted 8x6 in. will produce bloom from February on. Height 2 feet.

TROLLIUS LEDEBOURI (GOLDEN QUEEN)—Valuable, new hardy perennial plant, of vigorous growth, attaining a height of 4 feet and producing quantities of intense orange-yellow flowers four in. across, from June till November. Unlike other varieties of Trollius the seed of Ledebouri germinates readily. Will bloom the first year if started early in spring.

TUNICA SAXIFRAGA

A nice, tufted plant with pale pink, carnation-like, single flowers, born on thin, wiry stalks all summer. Fine for borders or rockeries. Hardy. Height 10 in. T. pkt. 10c; oz. 60c.

TIGRIDIA—Easily raised from seed. Sown in January or February in heat most of the seedlings will bloom the same year. Sow in very sandy soil, transplant as soon as the seedlings are large enough to handle, the sooner the better and let them come to bloom in the flats. Or you can plant the seedlings outdoors in May in very rich soil in full sun. Trigidias must have lots of water to do well and must be planted four inches deep, not less. Seed saved from a collection of very fine varieties. T. pkt. 20c; 1/16 oz. 35c; 1/8 oz. 60c; oz. \$4.00.

TRICYRTIS HIRTA

Hardy perennial flowers, lily-like, shaded pink dotted red, from September till frost. Fine for cutting and very striking when planted in groups in semi-shaded position. Height 20 in.

TITHONIA EARLY AVALON

Begins to bloom in mid-July from seed sown in the spring as soon as the weather is fairly settled, directly where the plants are to stand. Blooms till frost and produces high class material for cutting, in many colors such as fiery scarlet, orange, pink, etc. Annual. Height 6 ft. T. pkt. 20c.

VIRGINIAN STOCK

CRIMSON GEM—The best variety, producing large deep crimson flowers on plants 18 in. high from May to September. Thrives in any kind of soil exposed to sun, especially so in the coast regions and is one of the best plants for bedding, borders, etc. Annual. T. pkt. 10c; oz. 80c.

VISCARIA—FLAME FLOWER

CARDINALIS—Hardy annual growing in tufts and bearing fiery, red single flowers 2 inches across. Grown in a bed the brilliant coloring of these flowers makes a strong effect. Fine for bouquets, as a pot plant and for bedding. Will do well in any kind of soil and withstand hot and dry weather, blooming all summer. Sow the seed where the plants are to stand, later thin out to 6 inches apart. Height, 12 inches. T. pkt. 10c; oz. 45c; lb. \$4.00.



Verbena

Sow the seed indoors in February and March or direct in the open in May. Soak the seed in warm water for a few hours to hasten germination.

Plants intended for spring sales should be placed in 2-inch pots when about 1 inch high and the pots plunged in a mild hotbed. Lift the pots now and then and rub off the roots that go through the bottom of the pot to induce plants to bloom earlier. In the open the plants should be spaced 15 inches apart. Pinch the plants to induce bushy growth.

Verbena is a drought and heat resisting plant, thriving in almost any kind of soil. In medium or even in rather poor soil Verbena produces exceptionally fine, brightly colored flowers. Never plant Verbena in freshly manured ground and water the plants only during very severe drought.

VERBENA GIANT FLOWERED

Plants of vigorous spreading growth $2\frac{1}{2}$ ft. in diameter, from 8 to 12 inches high. Flowers in large trusses, florets over an inch across.

BRIGHTNESS—Rosy scarlet, large white eye.
BRILLIANT—Flame rose-pink, small white eye.
CERISE QUEEN—Scintillating soft salmon-cerise.
COCCINEA—Scarlet, small white eye, very showy.
CRIMSON GLOW—Glowing crimson, rich and showy color.
ETNA—Bright deep red, creamy eye. (Rosamond).
FLORADALE BEAUTY—Extremely large flowers, rose and red shades.
LAVENDER GLORY—Clear lavender, cream eye.
LUCIFER—Brilliant flaming scarlet self.
LUMINOSA—Fiery pink shading to salmon. (Newport Salmon).
METEOR—Flaming red, bold white eye.
ROSEA STELLATA—Rose pink, white eye.
ROSE CARDINAL—Luminous rose, large white eye.
ROYALE—Rich deep royal blue, large cream eye.
SCARLET QUEEN—Vivid scarlet, large white eye.
SNOWFLAKE—Snow-white flowers.
SPECTRUM RED—Brightest scarlet, no eye, huge flowers.
VIOLACEA STELLATA—Rich violet, white eye.
MIXED. Any color: T. pkt. 10c; $\frac{1}{8}$ oz. 30c; oz. \$1.80.

VERBENA DWARF ERECT

Plants 18 to 20 in. in diameter of compact habit, 7 to 8 in. high with 20 or more stiff erect branches each bearing 3 to 5 heads of 2 inch florets. First rate for bedding, borders and for marketing in flats.

BLUE SENTINEL—Rich violet-blue, white eye.
BRILLIANT—Flaming scarlet, white eye.
CARMINE BALL—Bright carmine, white eye.
DARK BLUE—Rich ultramarine blue.
FIREBALL—Brilliant scarlet-crimson.
SNOWBALL—Pure white.
VENUS—Soft pink, suffused copper.
MIXED. Any color: T. pkt. 15c; $\frac{1}{16}$ oz. 30c; $\frac{1}{4}$ oz. 50c; oz. \$3.60.

VERBENA ROYAL BOQUET

Plants of upright erect habit, producing 10 to 12, sixteen to eighteen in. long branches and the branches form a neat and compact cluster. Each branch bears large head of florets measuring good 3 inches across. Excellent for cutting.

CARMINE BOQUET—Vivid carmine, white eye.
PASTEL BOQUET—Pastel shades, flowers extra large.
ROSE BOQUET—Brick rose.
VIOLET BOQUET—Deep Violet.
WHITE BOQUET—Clear white.
MIXED. Any of the above: T. pkt. 15c; $\frac{1}{16}$ oz. 30c; $\frac{1}{4}$ oz. 50c; 1 oz. \$3.60.

VERBENA SPECIAL MIXED Very choice mixture of large flowered named varieties in a wide range of colors. T. pkt. 10c; $\frac{1}{8}$ oz. 30c; oz. \$1.00; lb. \$14.00.

It is the nature of verbena seed to germinate unevenly. First seedlings appear 2 weeks after sowing and the rest of seedlings keeps on coming for 4 weeks after that. Verbena Citriodora and Venosa is still slower in sprouting, the first seedlings appearing 4 weeks after sowing and the last about 4 weeks after that.

VERBENA AUBLETIA Hardy perennial creeping plant in bloom all summer. Flowers colored violet and carmine. Fine for covering dry banks for bedding, borders and rockeries. Height 15 in. T. pkt. 10c; $\frac{1}{8}$ oz. 20c.

VERBENA BONARIENSIS

Easily raised hardy perennial of exceptionally vigorous upright growth, entirely different from the regular type. Arrests attention and creates lots of comment when seen in bloom. The flowers are of attractive rosy-lavender produced in quantity on long stiff stems from June to frost, the first year if started early. Height 4 ft. T. pkt. 15c; $\frac{1}{8}$ oz. 20c; $\frac{1}{4}$ oz. 35c; oz. \$2.00.

HARDY VERBENA VENOSA

In bloom continuously from April till frost. Besides being a high class hardy perennial and a pot plant, it is a first class plant for bedding, edging, for covering steep banks, graves, etc. You will find it a beautiful flower, a fast selling plant, about the easiest to propagate and a plant that you can use to advantage the year round. Height 9 in.

VERBENA VENOSA ALBA—Flowers silvery-white.

VERBENA VENOSA LILACINA—New. Delicate lavender blue. T. pkt. 15c; $\frac{1}{8}$ oz. 40c.

VENOSA PURPLE—Reddish-purple. T. pkt. 15c; $\frac{1}{8}$ oz. 35c.

VERBENA CITRIODORA Lemon Verbena. A low growing tender plant which may be grown in the garden in summer and in pots in winter. The dried, highly scented leaves are used for perfuming. T. pkt. 15c; $\frac{1}{16}$ oz. 30c; $\frac{1}{4}$ oz. 50c.

VALERIANA RUBRA COCCINEA

Produces bright carmine-red flowers in May and June on long stiff stalks valuable as a cut flower for mixed bouquets and sprays. Hardy perennial. Height 3 ft. T. pkt. 10c; $\frac{1}{8}$ oz. 25c.

VERBASCUM PHOENICEUM

Hardy perennial of neat growth, producing from May to September magnificent spikes of bloom, high class for bouquets. Fully as beautiful as Belladonna Delphinium, however the formation of bloom is entirely different. Very distinct and very desirable. Will thrive even in poor soil either in full sun or partial shade. We offer large flowered new hybrids mostly in shades of purple, pink and lilac. Height 4 ft. T. pkt. 15c; oz. \$1.20.

VIBURNUM CARLESI

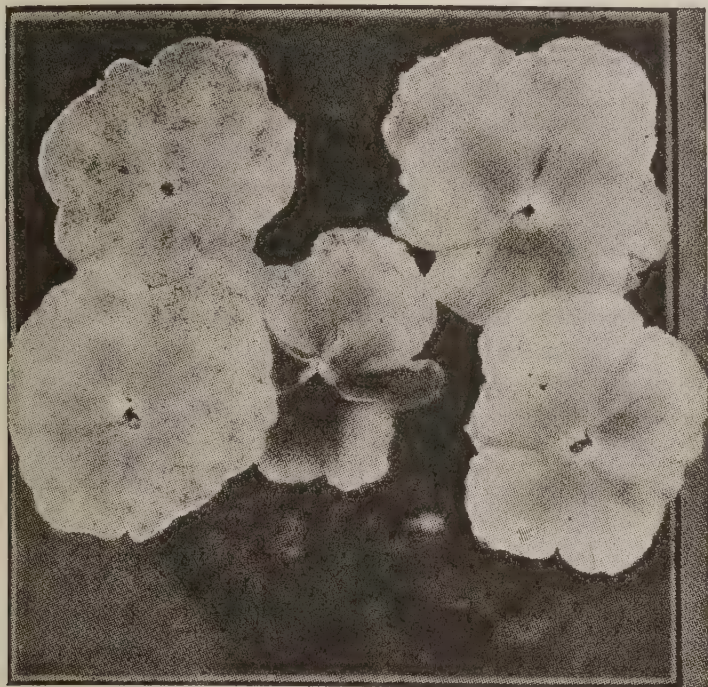
Classed by many as the most beautiful, perfectly hardy, flowering shrub now in existence. Flowers flesh pink, buds coral red possessing a marvelous clove fragrance. Easily raised from seed that germinates usually in the spring if sown in the fall or late in summer if sown in the spring. Once started grows rapidly a foot or more in a single season. There is and there will be for years to come, demand for this exquisite shrub. You cannot possibly invest your money safer than in seed of Viburnum Carlesi.

Vinca Rosea

CULTURE—Sow in January or February in flats filled with good soil mixed with sharp sand. The seed germinates readily, but the box must be placed in a temperature of 70 to 75 degrees. When the plants are large enough to handle they must be transplanted into other boxes filled with the same kind of soil and when they have 2 or 3 pairs of leaves are potted, later shifted outdoors, when all danger of frost is over, one foot apart. They are good and inexpensive bedding plants and take the place of geranium, bloom profusely till frost, if the soil where planted is not stiff and if well watered. Height 18 inches.

BRILLIANT CRIMSON, very rich, **PINK**, bright rose-pink, **DELICATA**, soft shade of pink, **TWINKLES**, light pink, red eye, **WHITE**, pure white, **WHITE** with crimson eye, **MIXED**. Any color: 1 pkt. 10c, $\frac{1}{8}$ oz. 20c, oz. \$1.20.

VICIA SNOWDRIFT Hardy perennial climbing plant producing immense quantities of snow white flowers from May to August. High class for floral work. No amount of heat or dry weather affects it. Thrives in any soil in full sun. Can be grown with or without supports. Height 4 ft. T. pkt. 15c.



Hardy Violas

Violas are first class hardy perennials for bedding and cutting, blooming from early spring till frost. Some varieties produce large flowers comparing in size with pansies, others are small flowered. While pansies are started from seed every year, Violas last for a number of years.

FLORAIRE—Flowers small, pale blue, produced from early spring till frost. Does not come quite true from seed. Fine for edging, bedding and an excellent subject for rockery. T. pkt. 25c.

ARDWELL GEM—Large shapely Viola, pure deep chrome-yellow flowers of good substance. A fine variety. T. pkt. 20c; 1/16 oz. 30c.

ARKWRIGHT RUBY—Color ruby red of exceptional richness. Sells at sight. Fragrant. Comes true from seed. T. pkt. 20c; 1/16 oz. 40c; oz. \$5.00.

VIOLA BOSNIACA—Very floriferous, blooms perfectly formed, dark violet-blue on stems 6 inches long, invaluable for cutting and bedding. Plants compact, only 3 inches tall. T. pkt. 20c.

VIOLA CYCLOP—An extra choice hardy viola of dwarf compact growth. Flowers large of lustrous dark violet purple with a vivid snow-white center from May to frost. Height 6 in.

VIOLA CHANTREYLAND—Pure apricot, very free blooming, highly attractive when massed in beds. T. pkt. 25c; 1/16 oz. 40c; 1/8 oz. 60c; oz. \$4.00.

HASLEMEERE—Comes nearest to a pure pink of any of the violas. Very free flowering. T. pkt. 15c.

VIOLA JERSEY GEM—Very neat variety, bearing on straight stout stems about 6 inches long, deep clear violet flowers. Fine for bedding as well as for cutting. In our locality needs protection over winter. T. pkt. 50c.

VIOLA KING HENRY—Deep violet blue, center heavenly blue with a bright yellow eye, highly effective. Plants compact, covered with blooms. T. pkt. 20c; 1/16 oz. 30c; 1/8 oz. 45c.

VIOLA PAPILIO—In bloom from early April till frost, doing well in sun or partial shade, lighting up any spot in the garden with its deep blue and white, lovely flowers. Will bloom in twelve weeks from seed and is about the most valuable and desirable of all hardy Violas. Excellent rock plant. Height 10 in. T. pkt. 15c; 1/8 oz. 35c; oz. \$2.00.

PRIMROSE DAME—Pure yellow, plants of compact habit always in bloom.

VIOLA PINK QUEEN—Large dark lavender-pink flowers on dwarf compact plants. T. pkt. 20c; 1/16 oz. 35c; 1/8 oz. 65c; oz. \$8.00.

VIOLA G. WERMIG—Free flowering, early, flowers rich violet blue on long stems. (Varies).

VIOLA LORD NELSON

Grow this Viola for spring sales. You will sell no end of plants. Of neat compact growth and a mass of bloom during April and May—and throughout the summer. Color glowing violet-purple, very attractive. Height 6 in. T. pkt. 25c; 1/8 oz. 60c; oz. \$4.00.

VIOLA PRIZE MIXTURE—A mixture of small flowered varieties. T. pkt. 15c; 1/16 oz. 25c; 1/8 oz. 45c.

VIOLA SPECIAL MIXTURE—A mixture of large flowered violas. T. pkt. 15c; 1/16 oz. 25c; 1/8 oz. 45c.

YUCCA—ADAM'S NEEDLE

YUCCA ANGUSTIFOLIA—Dwarf growing variety with narrow and long leaves resembling a Dracanea. Flowers large, creamy white. Height 3 ft. T. pkt. 10c; oz. 60c.

YUCCA FILAMENTOSA—A stately plant with broad swordlike foliage and immense spikes of drooping, creamy white flowers. Strikingly beautiful. Fine as a solitary plant as well as for large rockeries. Height 6 ft. T. pkt. 10c; oz. 60c.

XERANTHEMUM

IMPERIALE—Large flowering dark purple red, very beautiful. T. pkt. 10c; oz. 80c.

DOUBLE MIXED—Excellent everlasting flower with elegant double flowers in several colors from June to November. Height 2 feet. Hardy annual. T. pkt. 10c; oz. 80c.



Dahlia Flowered

Gold Medal Zinnia

The colors are variations in red, yellow and violet, so-called pastel shades, difficult to describe. This new race of Zinnias created sensation wherever seen. Height 3-4 ft.

To produce flowers of maximum size, 6 inches across or over, this Zinnia must be planted in rich soil and must be spaced 2 feet apart. The plants will amply fill the intervening spaces and it will pay to give the plants all this space. **CULTURE**—The best time to sow is in April. Start the seed in heat to get satisfactory stand and sow the seed rather thick. Transplant when the plants are large enough. Zinnia can be transplanted even when in full bloom if taken out of the ground with a ball of dirt.

CANARY BIRD—A delicate shade of primrose-yellow.

CRIMSON MONARCH—Largest of the red shades.

DREAM—Deep lavender, turning to mallow-purple.

EXQUISITE—Light rose with a center of deep rose.

GOLDEN DAWN—Golden yellow.

ILLUMINATION—Deep rose self.

LUMINOSA—A charming shade of bright deep pink.

OLD GOLD—Glowing shades of old gold.

OLD ROSE—A real old rose shade.

ORIOLE—Orange and black bi-color.

POLAR BEAR—A very large, pure white.

ROYAL PURPLE—Rich purple.

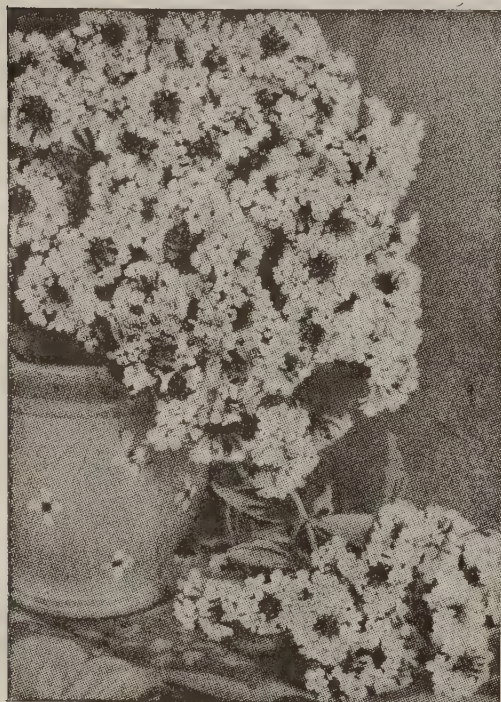
SCARLET FLAME—A large, beautiful, bright scarlet.

WILL ROGERS—Loveliest and most brilliant scarlet red.

ANY OF THE ABOVE DAHLIA-ZINNIA—T. pkt. 10c; 1/8 oz. 15c; 1 oz. 80c; lb. \$8.00.

WHITLAVIA GRANDIFLORA

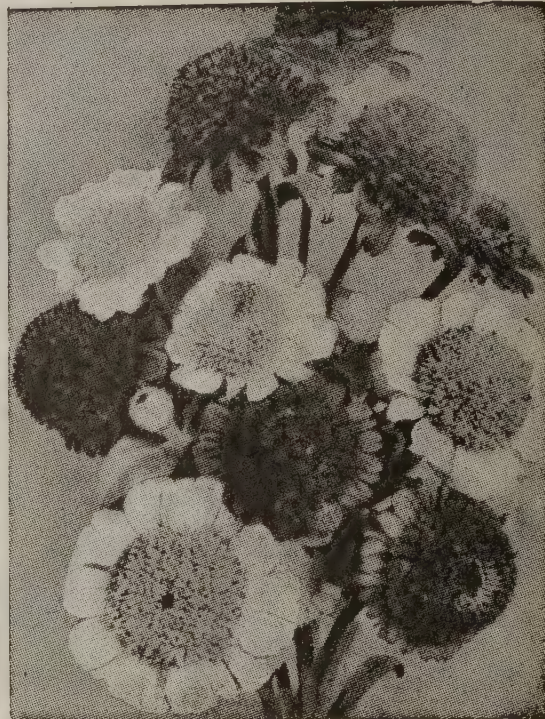
A gem for bedding, easily raised, producing masses of large gloxinia-like flowers of deep blue from May to September. Highly attractive, a real flower. Requires perfect drainage. Heat and drought resistant. Annual. Height 1 ft. T. pkt. 10c; oz. 45c.



Verbena Venosa



Wallflower Wonder



Zinnia Scabiosa Flowered

Wallflower-Goldlack

KEWENSIS will bloom for Christmas, if sown late in June or early in July. The others will begin to bloom in March and then for months afterwards, if sown in April or May, planted outdoors, carried over in a cold frame and brought into a cool house about the middle of February. They furnish valuable cut flowers.

WALLFLOWER HAMLET

New. Flowers single, very large, clear golden orange in color, much brighter than the color of Cheiranthus Allioni. Very superior and a flower that will pay to grow. Easily forced, fine for cutting as well as first rate pot plant. If you are looking for something unusual and new, this is it. Height 20 in.

DOUBLE WALLFLOWER FAVORITE—Large double fragrant flowers. Color brown with a satiny finish. An old favorite with the German people. Height 1 foot.

WALLFLOWER SINGLE MIXED—Choicest single varieties in many colors. T. pkt. 10c; oz. 60c; lb. \$5.00. Perennial.

SINGLE AND DOUBLE MIXED—This mixture contains many choice varieties. T. pkt 10c; 1/16 oz. 15c; 1/8 oz. 30c; oz. \$2.00.

SIBERIAN WALLFLOWER—See Cheiranthus.

VULCAN—Flowers of crimson, single. Makes a symmetrical, well-branched plant, fine for pots. Height 16 inches. T. pkt. 10c; oz. 80c.

GOLIATH—Flowers extra large, single dark brown, very beautiful. Height 24 inches. T. pkt. 10c; oz. 80c; 1/8 oz. 15c.

WALLFLOWER GOLIATH TRIUMPH—Immense spikes of the most brilliant crimson, individual flowers extra large in size. Of robust growth, early, an extra choice single flowering sort for pots, bedding or cutting. Fine forcer. Height 2 feet. T. pkt. 10c; oz. 80c; 1/8 oz. 15c.

KEWENSIS—Winter-flowering wallflower. Flowers pale primrose passing to orange yellow and violet, very fragrant. Blooms from November till spring. Height 30 in. T. pkt. 15c; 1/16 oz. 25c.

PARISIAN FORCING—This is sown early in the spring for summer bloom. Flowers single in red, white, yellow and velvety brown colors. T. pkt. 10c; oz. 60c Annual.

RUPPERT'S PRIZE WALLFLOWER

The plants are bushy and compact 20 in. in height, the foliage is light green. Individual flowers are fully as large as a silver dollar, of a fiery garnet-red color, extraordinarily beautiful. If you will raise some of this, you can be sure that your plants will sell at a good price. An excellent variety for pots and cutting. Distinct from regular "Ruppert." The old sort is dark brown in color, the variety we offer is larger and of a dazzling red. T. pkt. 15c; 1/16 oz. 35c; 1/8 oz. 60c; oz. \$4.00.

WALLFLOWER EARLY WONDER

A perfectly double wallflower, that can be had in bloom all year around. No matter what time the seed is sown, never fails to produce bloom five months after sowing. Will bloom at Christmas time if sown in July. The main spike is thickly set with large double blossoms of perfect shape, the lateral branches that appear later, also bear fine flowers, fine for cutting. The flowers have a wonderful scent. The colors are canary yellow and brown. Height 24 to 30 in. Annual. MIXED. T. pkt. 15c; 1/16 oz. 30c; 1/8 oz. 50c; oz. \$3.00.

WALLFLOWER EARLY WONDER VIOLET—Dark violet.

Veronica

The varieties we offer are all hardy perennial plants that are easily raised from seed doing well in both dry and moist soils and are useful for bedding, rockeries and cutting. V. Gentianoides and V. Prostrata bloom in May, both varieties produce beautiful spikes of bright blue in quantities. Of great value in mixed bouquets for Memorial Day.

VERONICA GENTIANOIDES—Forms a neat mat of dark bright green foliage that stays green throughout the season. Flowers light blue produced in quantity in May and June. Height 2 ft. T. pkt. 10c; 1/16 oz. 25c; oz. \$3.00.

V. PROSTRATA COELESTINA—Plants form a neat carpet of dark green foliage and a sea of bright dark blue flowers above, in May and June. High class for cutting and for covering dry hot banks and to plant in crevices of rocks. Height 5 in. T. pkt. 25c.

VERONICA INCANA—Plants of neat compact growth with grayish green foliage, flowers bright blue from June to September. Height 1 foot. T. pkt. 20c; 1/8 oz. 50c.

VERONICA SPICATA—Plants of pyramidal growth, flowers long slender spikes closely set with neat, rather small star shaped bright blue flowers from June to September. Height 3 ft. T. pkt. 10c; 1/8 oz. 25c; oz. \$1.60.

WISTARIA CHINENSIS

A beautiful fast growing climber, producing quantities of extremely showy, light blue pendulous flowers in May and again in August and September. Easily raised from seed and perfectly hardy. Requires full exposure to the sun. T. pkt. 10c; oz. 30c; lb. \$2.60.

SCABIOSA FLOWERED ZINNIA

The flowers, about 4 in. across, have scabiosa-like centers and broad petals around the base in shades of red, pink and yellow, extremely beautiful. Upon first sight nobody would believe that this is a variety of Zinnia. Height 3 ft. T. pkt. 15c; oz. \$2.00.

ZINNIA SUPER CROWN O' GOLD

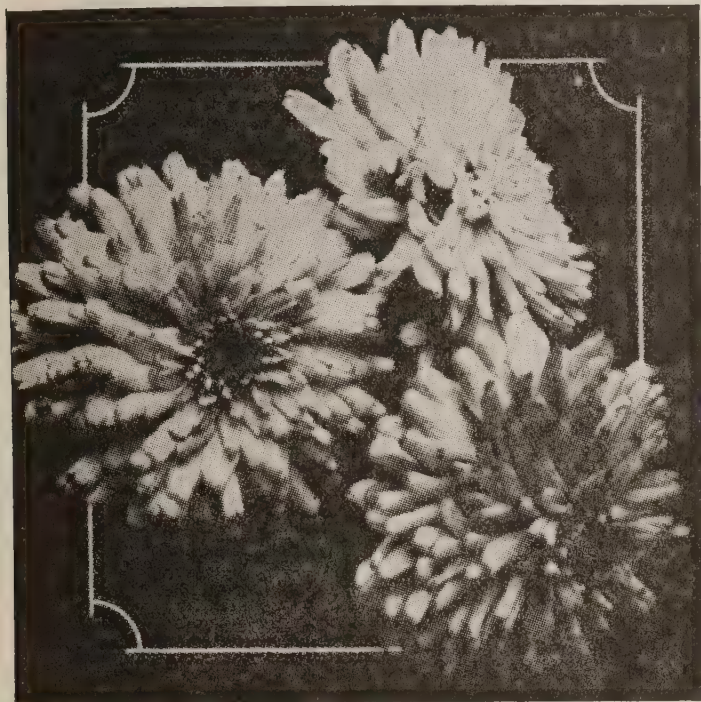
Truly outstanding, both as a cut flower and garden plant. Flowers 5-6 inches across, double, well formed in a wide range of colors, including both soft shades, as well as strongly pronounced self colors with each petal marked with deep golden yellow at the base, while individual color is carried out at the tips. Plants of compact, upright growth, 4 feet tall. In bloom 60 days after seed is sown. T. pkt. 10c; oz. 80c.

ZINNIA LINEARIS

Plants compact and neat, covered with bloom all summer, even when the weather is hot and dry. Flowers single, golden orange with a lemon-yellow stripe through each petal. Blooms 10 weeks after sowing. We strongly recommend Zinnia Linearis. T. pkt. 15c; 1/8 oz. 25c; oz. \$1.80.

OUR TRADE PACKETS

are double the quantity of retail packets. Our packets are well filled with fresh seed of strong germination, strictly true to name. When it comes to quality our seeds are 100 per cent. You will get no junk from us.



ZINNIA GIANT PICOTEE

Valuable as a cut flower. Each petal is distinctly marked with a narrow band of dark maroon. The ground colors are many. The seed we offer produces about 60 per cent Picotee flowers. Height 3 ft. All colors mixed. T. pkt. 10c; $\frac{1}{8}$ oz. 15c; oz. 80c.

ZINNIA "DELIGHT" Double Pompon type, very floriferous and of neat compact growth. The petals of the flowers are ruffled and curled, giving a light and dainty effect. Each petal is beautifully picoted, making it a most striking flower. This is an excellent variety for basket work and florists' use in general. The assortment of colors includes salmon shades, cream, buff, biscuit, golden yellow and lavender. Height 24 inches. T. pkt. 10c; $\frac{1}{8}$ oz. 20c; oz. \$1.20.

ZINNIA DOUBLE GIANTS OR COLOSSAL

Flowers of enormous proportions very double and showy. Our mixed seed contains pastel shades, that is, colors that cannot be very well defined in words. These off color plants are of startling beauty and highly interesting. The best of all large flowered double Zinnias. MIXED. T. pkt. 10c; oz. 60c; lb. \$8.00.

ZINNIA ELEGANS DOUBLE

This strain produces perfectly double, well formed flowers, on stalks 3 feet high and makes a good cut flower. An ornament in any garden and especially fine for flowering summer hedges. MIXED—T. pkt. 5c; oz. 40c; lb. \$3.00.

ZINNIA BODGER'S GIANTS

This Zinnia bears imbricated and flat flowers, the reverse of petals not showing. This makes the flowers attractive from the time they open until they fully develop. Perfectly double and of extraordinary large size. High class for cutting. Our mixture contains many colors and is made up by us from the finest named varieties. Height 4 ft. T. pkt. 10c; $\frac{1}{8}$ oz. 15c; oz. \$1.00; lb. \$12.00.

ZINNIA MISS WILLMOTT A masterpiece of the Bodger's Giant type, with splendidly formed flowers that are flat, not showing the reverse of petals, of most pleasing delicate salmon-pink. A high class florists and show flower. Height 3-4 ft. T. pkt. 10c; $\frac{1}{8}$ oz. 15c; oz. \$1.00.

ZINNIA DOUBLE POMPON (Elegans Pumila)

Also known as CUT AND COME AGAIN ZINNIAS. The flowers are extra double forming a symmetrical elongated smooth cone $2\frac{1}{2}$ inches across, produced in greatest profusion on plants about 20 inches tall, from early midsummer till frost. First rate for cutting as the flowers will stay in first class condition for several days when cut. Ideal for bedding, ribboning and as a cut flower of long keeping quality.

GOLDEN YELLOW, SULPHUR YELLOW, DEEP SCARLET, BRIGHT CRIMSON, VELVET DARK CRIMSON, ROSE PINK, SALMON PINK, VIOLET, GOLDEN ORANGE, WHITE, MIXED. Any color: T. pkt. 10c; oz. 60c; lb. \$6.00.

ZINNIA EARLY WONDER The plants are 18 inches tall, flowers of medium size, the type of double pumila Zinnia borne on long stems, ideal for cutting. Will be found a highly paying greenhouse crop as it occupies very little space, produces a big crop of flowers and is ready to cut six weeks after sowing. The colors are: Bright rose-pink, deep red, scarlet, salmon-red and orange. T. pkt. 10c; $\frac{1}{8}$ oz. 25c; oz. \$1.60.

CANNOT SUPPLY—Where prices are not quoted for any item in this catalog it means that we are unable to supply the seed. Things will change when the war is over which we hope will be soon.

ZINNIA GIANT CRESTED

(Howard's). Plants branching 3 ft. tall, flowers with full cushion-like center surrounded by several rows of guard petals four inches across borne of strong stems. Wide range of colors. Of high value for cutting. T. pkt. 15c; $\frac{1}{8}$ oz. 30c; oz. \$2.00.

ZINNIA MINIATURE

(Mexican Hybrids). Plants 1 to $1\frac{1}{2}$ ft. tall, flowers 1 to $1\frac{1}{2}$ inches across, freely produced all summer and fall. The flowers are double, semi-double as well as cactus flowered in many colors and color combinations with a charm all their own. First class for bedding, edgings and cutting. T. pkt. 15c; oz. \$1.00.

ZINNIA LILIPUT—BABY ZINNIA

Zinnia Liliput produces from spring to frost, immense quantities of very double, perfectly formed flowers, first class for florists' work. Liliput is the Queen of Zinnias, excelling in gracefulness, genuine beauty and elegance and should be made use of in bedding extensively. Massed in beds, few flowers will outshine Liliput. Height 18 in.

CANARY-YELLOW, CRIMSON, FIREFLY, fiery scarlet. FLESH PINK, GOLDEN YELLOW, GOLDEN ORANGE, bright orange yellow, LILAC, PURPLE, ROSE-PINK, rich rose-pink. SALMON ROSE, WHITE, pure white. MIXED. Well balanced mixture. PRICE. Any color, T. pkt. 10c; oz. 60c; lb. \$6.00.

LILIPUT BLACK RUBY—Blackish maroon a very dark color yet it is not a dull color, the velvety texture of the petals gives the flowers a rich appearance. T. pkt. 20c; $\frac{1}{8}$ oz. 30c; oz. \$1.80.

ZINNIA FANTASY—Flowers medium sized with twisted petals in many colors. A new type of Zinnia admired by most but not by all flower lovers. Height 30 in. MIXED—T. pkt. 15c; $\frac{1}{8}$ oz. 20c; oz. \$1.20.

Ornamental Grasses

COIX LACHRYMAE. Grown for its pearly, shiny seeds which are strung as beads. Hardy annual. Height 30 in. T. pkt. 10c; oz. 20c; lb. \$1.20, prepaid.

AGROSTIS NEBULOSA. Its extremely delicate feathery-like panicles are very useful for vases and bouquets. Annual. Height 18 inches. T. pkt. 10c; oz. 50c.

ARUNDO DONAX. Bears showy, silky white plumes from 2 to 5 feet in length and is one of the finest of ornamental grasses. Hardy perennial 5 to 15 ft. tall. T. pkt. 10c; $\frac{1}{4}$ oz. 20c.

BRIZA MAXIMA. Grown for its graceful, loosely flowered and open panicles. Annual. Height 18 inches.

CYPERUS ALTERNIFOLIUS. The well known umbrella plant. Tender perennial, 2-3 ft. tall. T. pkt. 10c; $\frac{1}{8}$ oz. 20c.

EULALIA JAPONICA. Grown for its long, narrow, green foliage and very ornamental silvery gray plumes. Hardy perennial, 4 to 6 feet tall. T. pkt. 10c; $\frac{1}{8}$ oz. 15c.

ERIANTHUS RAVENNAE. Hardy perennial much used in place of the tender Pampas Grass. Striking in appearance; the heavy silky plumes a most excellent material for winter use. Height 4 to 7 feet. T. pkt. 10c; $\frac{1}{8}$ oz. 15c.

LAGURUS OVATUS. Produces satiny white heads useful for dry bouquets. An annual 18 inches tall.

PENNISETUM RUPELLIANUM. Grown for its graceful, long, purplish plummy spikes. Tender perennial 3 ft. tall. T. pkt. 10c; $\frac{1}{8}$ oz. 20c.

STIPA PENNATA. Panicles of very feathery appearance. Hardy perennial 3 ft. tall. T. pkt. 10c; $\frac{1}{8}$ oz. 35c.

FLOWER SEEDS

Nowhere will you get seeds of better quality than what we send out. Our Begonia, Snapdragon, Calceolaria, Cineraria, etc., seeds are raised for us by specialists. Many flower seeds we grow ourselves. Our seeds have strong germination. In comparative trials you will find our seeds of superior quality.

ZINNIA LINEARIS is a wonderful little flower. Of neat compact growth staying in bloom from early in the season till frost and at all times a solid mass of elegantly shaped flowers. First class to plant in parkings, around the base of a house in beds, ribbons and for cutting. It is highly heat and drought resisting and very much worth while growing.

Bulbs and Roots

Tuberoses Double Pearl

Our tuberoses bulbs are of high quality, clean, healthy and strictly up to grade grown under our own supervision, true Dwarf Double Pearl. We rogue our plantation several times during the growing season removing all tall growing singles.

F. O. B. Council Bluffs	Per 12	Per 50	Per 100	Per 1000
DOUBLE PEARL—3 to 4 inch.....	\$.50	\$.80	\$ 1.50	\$ 12.00
DOUBLE PEARL—4 to 6 inch.....	.65	1.10	2.20	19.00

How to Grow Dahlias Plant at any time from April to middle of June in thoroughly stirred soil. Lay the tuber flat on its side, space 3 feet apart and cover 8 inches deep. Dahlias show up and do much better when a few plants are grown together. Allow only one stalk to grow from each tuber and when the second set of leaves has appeared pinch out the middle bud. This will induce dwarf growth, the plants will branch freely, strong winds will not blow them down and no support will be needed. Cultivate after every rain until the plants set buds, when they will need lots of water. Do not water at all previous to bud stage as this would cause rapid but soft growth.

Mulching after the plants start to form buds with weeds, grass clippings or manure is very beneficial. If you grow for cut flowers disbud, and cut off all the faded and undesired flowers with as much stalk as possible. To make cut bloom last, cut early in the morning. Put 4 inches of hot water (not boiling) in a shallow pan, place the ends of stems into it and hold there about one minute or until stem is discolored. Then place in deep cold water. Over winter store the tubers in a cool but frost proof place.

In the South Dahlias must not be planted till middle of June. Water abundantly to help them grow and to keep them cool and you will have fine flowers from September on. If planted say in March or April the growth will be forced and weak, they will bloom in May but the first hot spell in June will put them out of commission. Dahlias do well in the South but must be planted late.

Giant Tiger Lily

Tigrinum Fortunei giganteum

Every flower grower should have a planting of Tiger Lilies. No hardy plant will give him better returns. Tiger Lily is and always has been, the most popular lily with the public, therefore readily salable, in and out of bloom. It is absolutely hardy, it never winter-kills, planted either in the spring or fall, multiplies rapidly and furnishes a wealth of first class bloom. The showy blooms are bright orange red, dotted black, and carried on stalks 4 to 5 ft. high. Cannot supply.

DOUBLE TIGER LILY—Of robust growth and absolutely hardy. Flowers of elegant form resembling in formation of bloom several stars loosely pinned together, pinkish orange in color faintly penciled with black. Cannot supply.

Lilium Tenuifolium

SIBERIAN CORAL LILY—Fine cut flower, for bedding, rockeries, etc. Good sound two years old bulbs. POSTPAID: 5 for 35c; 10 for 65c; 25 for \$1.25; 50 for \$2.25; 100 for \$4.25.

ISMENE CALATHINA

(Peruvian Daffodil). Flowers pure white, sweet scented, trumpet shaped resembling a large Daffodil, borne in clusters on strong 3 feet tall stems in June-July. Not hardy. Should be grown like Gladiolus. Dozen, \$1.80; 25 for \$3.00, not prepaid.

LILIES IN POTS Pot up some small lilies in the fall, like *Tenuifolium*, *Cernuum* and *Concolor* using 5 inch pots, placing 3 bulbs in each pot. Place on the bottom of the pot small rocks to insure good drainage and cover with a layer of small pieces of charcoal. For soil use sod loam, some sharp sand with one-third of leafmould. Place the bulbs in the middle of the pot and fill the pots to within an inch from the rim. Place pots in a cold frame, protect from heavy frost and carry into the greenhouse early in the spring. Water regularly but sparingly. These small lilies are easily and inexpensively raised from seed and easily sold by simply exposing them to view when in bloom.

HARDY SCABIOSA—Fischeri, Speciosa and Caucasica are long lived perennials absolutely hardy and first class flowers that pays to grow if flowers mean anything to you. Scabiosa Japonica here in Iowa acts as a biennial and must be sown every year. By all means try Japonica. Scabiosa Columbaria is one of the most beautiful of flowers and will pay to grow even if it has to be started from seed every year since it is not dependably hardy.

FLORISTS RAISE CABBAGE

and other vegetable plants. Make profit before selling a single plant by ordering your seed from us. See our prices.

Grow Early Flat Dutch Cabbage, a variety suited for both early and late. Giant Pascal Celery, a quality sort that makes the nicest looking plants. Egg Plant Black Beauty, the best of all. Tomato Bonny Best, the most popular. Cauliflower, Pepper Ruby King and Curled Parsley.



Choice Cannas

Our cannas are straight, true to name stock, not a mixture or something worse yet. We grow cannas on a fairly large scale. When our stock of roots is gone, we do not try to pick up a supply of roots on the open market, because we want to be sure that the roots we send out are not mislabeled. Our supply of canna roots is not unlimited. Order early.

STARTING CANNAS—The first batch of cannas is generally started up early in March. Cut the rhizomes into 2-inch or 3-inch pieces, each with one eye at least, place them in flats on a layer of coarse soil, cover with sand, water well set the flats on the returning heat pipes; it is necessary to supply a little bottom heat in order to get best results.

When a young growth is about three inches high, remove the flats to a light bench and about two weeks later pot the plants up singly in 3½-inch pots, where they can remain until bedded out. As all the eyes will not start equally fast, potting will have to be done over a period of time, allowing underdeveloped plants to continue growing in flats until proper size is reached.

HOW TO STORE CANNA ROOTS—We dig the day first frost hits the canna tops. We cut the tops with a saw flush with the ground then dig, leaving the clumps with plenty of soil adhering exposed to the sun for a few hours. We store the roots piled up one on the other with tops down in a cellar that is moderately damp and frost proof.

Prices quoted are for dormant 1-2 eyed bulbs.

ALLEMANIA—Green leaved. Scarlet flowers, with broad yellow border. Height 5 feet. Not prepaid: 25 for \$1.25; \$4.00 per 100.

APRICOT—Color deep buff, base suffused pink, flowers very large in immense trusses. Foliage green. Withstands rain and hot sun better than most other sorts. Height 4½ ft.

PRESIDENT—Green leaved, scarlet flower. Height 4 feet. Not prepaid: 25 for \$1.50; \$5.00 per 100.

KING HUMBERT—Bronze foliage, scarlet flower. Height 5 feet. Not prepaid: 25 for \$1.25; \$5.00 per 100.

MRS. A. CONARD—Green foliage, pink flowers. Height 4 feet. Not prepaid: 25 for \$2.00; 100 for \$7.00.

YELLOW KING HUMBERT—Green foliage, yellow flower. Height 5 feet. Not prepaid: 25 for \$2.00; 100 for \$7.00.

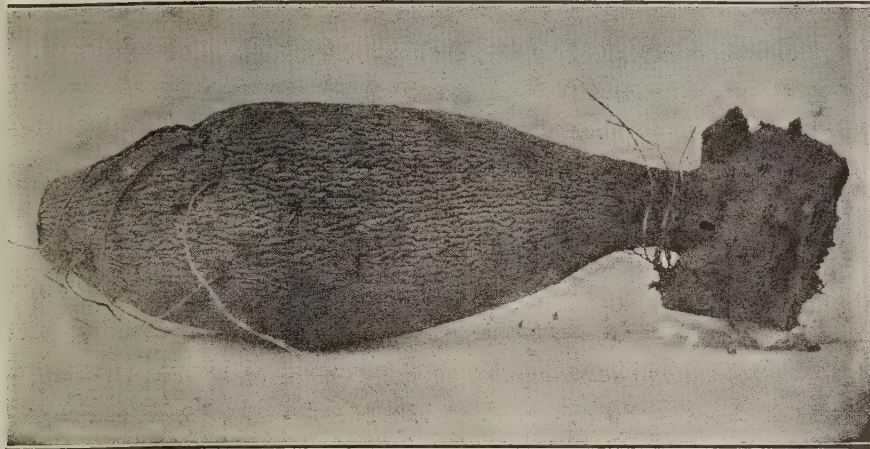
KING MIDAS—Flowers extra large of rich deep golden yellow color in large trusses. Beautiful. Height 4 ft.

ORANGE HUMBERT—A sport from red Humbert, fine bronze foliage, flowers in immense trusses of true orange yellow color. Strong grower. Height 5 ft. 25 for \$1.50.

We grow our own canna. Our stock is true to name, not mixed. **ROSAMOND**—Height 3½ ft. Foliage green, flowers very large in large trusses bright red with an irregular and wide border of yellowish brown. Pronounced by many as the most beautiful of cannas. Height 4 ft. 25 for \$1.80; 100 for \$6.00.

FALL SOWING OF SEEDS. In sections of the country where during winter mild spring-like weather prevails with no snow on the ground, followed by heavy frosts, fall sowing is apt to prove no success. This can be overcome by mulching the sown area with straw and similar material.

Choice Dahlias



Our list of Dahlia varieties is selected with the view of "giving the customer most for his money," mostly old varieties that stood the test of time, varieties that are favored by growers of experience, an unmistakable proof of their high value. If your aim is to grow a crop of high quality flowers that can be sold with profit, varieties listed by us are the varieties to grow.

CULTURE—Dahlia thrives in any good garden soil, the richer the soil the finer the flowers. Time to plant: From late in April to July 1st and always in an open and sunny situation. Lay the root flat in a hole in which the soil was well loosened by spading, cover with 6 inches of dirt and have the holes 3 feet part each way. Keep the weeds down.

A. D. LIVONI—Show or Ball type. Petals quilled, color soft pink, first rate for cutflower purposes. Dozen, \$1.80; 100 for \$12.00.

AVALON—Decorative. Pure clear yellow of exceptional charm. Dozen, \$2.00; 100 for \$15.00.

BERTHA HORNE—Cactus. Fine large flower of bronzy orange. Good stems, free bloomer. Dozen, \$1.80; 100 for \$12.00.

BRIDE'S BOQUET—Cactus. Pure white. Of splendid form, fine long stems, keeps long when cut. Dozen, \$2.00; 100 for \$15.00.

CLARA CARDER—Dec. Very large clear pink, plants short and bushy. Dozen, \$2.60; 100 for \$20.00.

ELIZABETH SLOCOMBE—Dec. Purple. Vigorous grower. Dozen \$2.00; 100 for \$15.00.

GOLDEN SONNE—Semi cactus. One of the finest in this class. Flowers large, most artistically formed. Color rich golden yellow lightly blendid with soft rose. Dozen, \$2.80.

JANE COWL—Dec. Giant in size, color warm buff yellow. Dozen, \$2.00; 100 for \$15.00.

JEAN KERR—Dec. One of the most valuable Dahlias for cutting. Fine long stems, color pure white. Dozen, \$2.00; 100 for \$15.00.

JERSEY'S BEAUTY—Dec. Very popular for cut flower purposes. Clear rich pink on long stiff stems. Dozen, \$2.00; 100 for \$15.00.

JERSEY'S WHITE BEAUTY—Dec. Pure white. First class for cutting. Dozen, \$2.60; 100 for \$20.00.

JERSEY'S BEACON—In the Jersey's Beauty class, color light scarlet. Dozen, \$2.00; 100 for \$15.00.

JOSEPHINE G.—Semi-cactus. Huge sparkling rose-pink. Dozen \$2.00; 100 for \$15.00.

LIBELLE—Cactus. Rich bright purple. One of the best for cutting. Dozen \$2.00; 100 for \$15.00.

MAUDE ADAMS—Show or Ball. A model of perfection for cutting. Snow white overlaid clear delicate pink. Dozen, \$1.80; 100 for \$12.00.

MARY BOWMAN—Show or Ball. Hard to beat for high class cut flower use. Flowers large, color deep bronze yellow. Dozen, \$1.80; 100 for \$12.00.

MELODY—Cactus. Bright yellow often tipped white. High class. Dozen, \$2.00; 100 for \$15.00.

MRS. JAMES ALBIN—Dec. Considered by experts as the best commercial yellow. Dozen, \$4.00.

MRS. GEORGE LE BOUTILLIER—Dec. Very, very beautiful dark carmine-red. Dozen, \$2.40; 100 for \$20.00.

MRS. I. de VER WARNER—Dec. Deep lavender. One of the finest Dahlias ever introduced. Dozen, \$1.80; 100 for \$12.00.

DAHLIAS—Continued

MONMOUTH CHAMPION—Dec. Very floriferous and of large size. Color brilliant flaming orange. Dozen, \$2.60; 100 for \$20.00.

NEGUS—Dec. Flowers of good size, color very dark crimson, almost black. Dozen, \$6.00.

POLAR SNOW—Dec. Flowers exceptionally large, of perfect form, pure white in color. In every way a high class variety. Dozen, \$2.60; 100 for \$20.00.

PRIDE OF CALIFORNIA—Dec. Rich crimson. Dozen, \$2.00; 100 for \$15.00.

ROSE GLORY—Dec. Very desirable Dahlias. Flowers of medium size of bright beautiful deep rose pink, borne on long and very strong stems produced in abundance till frost. Early. Wonderful cut flowers. Plants of medium height of strong upright growth. Dozen, \$2.00; 100 for \$15.00.

QUEEN CITY—Dec. Light cherry-red. Heavy bloom producer and one of the most valuable for cutting. Dozen, \$4.00.

SYLVIA DICKEY—Dec. Flowers of good size, color glistening pink. Free blooming. High class cutflower variety. Dozen, \$1.80; 100 for \$12.00.

SULTAN OF HILLCREST—Dec. Huge round orange yellow. Plants bushy. One of the finest Dahlias grown. Dozen, \$4.00.

THOMAS A. EDISON—Dec. Massive flowers of rich royal purple of artistic staghorn formation borne on cane stiff stems. Dozen, \$2.80; 100 for \$22.00.

MIXED DAHLIAS—Nothing but choice large double flowering varieties in this mixture. 100 roots for \$8.00; 50 for \$4.25; 25 roots for \$2.35, not prepaid.

PRICES FOR DAHLIA ROOTS—In lots of half a dozen at dozen rates. In lots of over a dozen at 100 rates. If a price is quoted at \$1.80 per dozen, one-half dozen costs 90 cents and 3 roots will be 45 cents. If \$4.00 per dozen, one-half dozen is \$2.00 and 3 roots \$1.00. When the price per 100 roots is \$15.00 and you order 20 roots the cost will be twenty times 15 cents. When the price is \$12.00 per 100 in lots of over a dozen each root will cost 12 cents. And so forth. Prices quoted are not prepaid.

BY MAIL PREPAID—No order can be accepted for less than 3 roots of a variety. Any variety priced at \$12.00 to \$16.00 per 100 roots will cost you per three roots prepaid 60 cents. Priced over \$16.00 to \$25.00 per 100, the price for 3 roots prepaid is 85 cents.

Choice Gladioli

Our Gladioli bulbs are young stock, clean and healthy, free of disease, full of vitality and blooming ability, grown from bulblets or cormels on rich, well drained ground under high cultivation, properly cured and there are none better in quality. (P) means Primulinus, a race of Gladioli that is especially desirable for forcing as it can be grown closer than the larger type Gladioli. They are very early, can be more quickly grown and the valuable greenhouse space utilized for some other crop. Whenever we say in our description **EXTRA EARLY** we mean that that variety will bloom in about 75 days from date of planting. **EARLY** means 85 days. **MEDIUM EARLY** 95 days, **LATE** 105 days. **VERY LATE** 115 days.

ALBANIA—Medium early. Extra large, pure white, edges finely ruffled, vigorous grower. A high class florist variety.

ALICE TIPLADY—(P.) Glowing orange-scarlet, fine for cut flowers. Early.

APRICOT GLOW—Early, tall, very strong grower. Flowers large bright apricot.

BAGDAD—Late. Old rose smoky salmon, considered as one of the finest in its class. Vigorous grower.

BEACON—Medium early. Flowers 4 inches across on stout stalks 5 feet tall. Color the brightest scarlet, throat a big splash of very bright pale yellow. One of the most beautiful of all gladioli. Try Beacon and see for yourself. Bulbs 1¼ to 1½ in. \$2.80 per 100.

BETTY NUTHALL—Late. Orange salmon.

BRIGHTSIDE—Early. The best early orange and an outstanding florists' variety.

CHAS. DICKENS—Early, tall strong grower with many open. Purple violet like Anna Eberlus, but much better. High class commercial.

COMMANDER KOEHL—Early. Clear dark scarlet, spikes tall and straight. Much better than Crimson Glow, more vigorous and of better color.

DEBONAIR—La France pink, medium early.

DUNA—Medium early. Color pastel shade of yellow-pink. Grown by us in Northern Minnesota its color is wonderful. Grown in Iowa subject to hot and dry weather it lacks the charm it has when grown under favorable conditions.

DR. F. E. BENNET—Medium early. Immense in size, most vivid flame-scarlet in color; once seen always remembered.

DREAM OF BEAUTY—Medium early. Flowers large of the shade of the American Beauty rose. Popular for cutting.

ELOISE—Medium early. Very fine lavender. May displace Minuet. Does well in all parts of country.

FLAMING METEOR—Medium early. Tall and vigorous, large flowered, deep scarlet self.

FLAMING SWORD—Flowers large of true flaming spectrum-red on tall, stout spikes. Medium early.

GLADIOLI

Albania
 Alice Tiplady
 America
 Apricot Glow
 Bagdad
 Beacon
 Betty Nuthall
 Brightside
 Chas. Dickens
 Commander Koehl
 Dream of Beauty
 Debonair
 Dr. F. E. Bennett
 Duna
 Eloise
 Flaming Meteor
 J. S. Bach
 Flaming Sword
 Golden Eagle
 Golden Dream
 Giant Nymph
 Harvest Moon
 Halley
 La Fiesta
 Le Marechal Foch
 Maid of Orleans
 Margareth Fulton
 Marmora
 Minuet
 Mrs. Leon Douglass
 Mrs. F. King
 Orange Queen
 Peggy Lou
 Pelegrina
 Phyllis McQuiston
 Polar Ice
 Picardy
 Pride of Wanakah
 Queen of Bremen
 Red Phipps
 Rose 1910
 Shirley Temple
 Smiling Maestro
 Sonatine
 Vagabond Prince
 W. H. Phipps

GLADIOLI MIXED

FLOEBISTS' MIXTURE—Made up of finest named varieties in a well balanced range of colors. If you want the very best at a small expense this is the mixture to buy. Dozen 40c, prepaid. No. 1 bulbs. Per 100, \$3.40; per 1000, \$30.00, for No. 1 size, not prepaid.

BIG BUY GLADIOLI MIXTURE

Nothing but first class named varieties evenly balanced in this mixture. Bulbs are size 1¼ to 1½, a size preferred by many flower growers for outdoor planting. PRICE: 100 bulbs for \$2.80, 1000 for \$24.00.

EMERGENCY GLADIOLI MIXTURE

To ease up the shortage in gladioli bulbs we are offering bulbs in size No. 3 which is bulbs ¾ to 1 inch across. From these bulbs you will get a crop of flowers of as good quality as flowers produced from full sized bulbs only your flowers will come a few days later, which really will make hardly any difference to most flower growers. With the smaller size of the bulbs goes down also the price. Per 100, \$2.10; per 1,000, \$18.00, not prepaid.

GLADIOLI named varieties is something, we regret to say, we are unable to supply this season. We have harvested a crop of fine plump bulbs but what bulbs we do have is nothing to the increased demand for bulbs. **GLADIOLI IN MIXTURE.** Every mixture of gladioli bulbs offered by us includes only first class cut flower varieties with a considerable amount of new, highly priced varieties. We can confidently say that the quality of our mixed gladioli is very high as our customers well know.

GOLD EAGLE—Extremely early, clear, deep yellow cut flower variety.

GOLDEN DREAM—Late. Extra tall, straight spikes, flowers large, pure yellow without markings. A dream in yellow.

GIANT NYMPH—Medium early. A superb variety. La France pink with a creamy yellow throat. Immense in size, vigorous grower. Will produce practically 100 per cent saleable spikes under almost any conditions.

HALLEY—Extra early, fine forcer. Salmon pink.

HARVEST MOON—Medium early Rich clear yellow tall straight spikes, exceptionally fine cut flower.

JONAH S. BACH—Early. One of the finest of glads. Both the florets as well as the spikes of immense size. Tall and vigorous grower.

LE MARECHAL FOCH—Medium early. Pale pink self color, flowers large. Vigorous tall grower.

LA FIESTA—Medium early. Orange-bronze, very tall graceful spikes. Heat and drought resisting variety.

MARGARETH FULTON—Clear rich dark salmon of a distinctive shade. Early.

MAID OF ORLEANS—Large milk-white flowers, vigorous tall grower. The best white at present.

MARMORA—Supreme for exhibition or commercial use. Hugh florets of smoky gray lavender with a deeper blotch. Perfect in spike formation, growth and habits.

MINUET—Outstanding among lavenders. Large flower of perfect form, perfectly placed, tall stately spikes.

MRS. LEON DOUGLASS—Medium early. Salmon-rose pink striped with brilliant scarlet. A real wonder gladiolus, tall and showy. Blooms five inches across. Popular as a commercial variety.

MRS. FRANK PENDLETON—Medium early, bright rose pink on white ground with blood red blotches on lower petals.

MRS. F. KING—Early, brilliant vermillion scarlet. Extra good.

ORANGE QUEEN—Early. Color copper orange. First class variety.

PEGGY LOU—Medium early. Deep shrimp pink.

PELEGRINA—Early. Dark blue. Spikes tall, florets large.

PHYLLIS McQUISTON—Medium early. Pure pink practically without markings. Vigorous grower, high class for cutting.

PICARDY—Of genuine merit and a leader to be for years to come. Extra large florets, petals of extra heavy texture, color apricot pink. Medium early.

POLAR ICE—Snow white. Both the individual flowers as well as the spikes of enormous size. Height 5 ft. Early.

PRINCE OF WALES—Displaced by Betty Nuthall.

PRIDE OF WANAKAH—Medium early, spikes tall and strong. Very large florets of deep lavender rose. Magnificent cut flower and exhibition variety.

QUEEN OF BREMEN—Very early. Flowers and spikes not very large but the color is outstanding, namely bright lavender pink. First rate to grow under glass.

RED PHIPPS—Medium early. Very bright light red excellent cut flower.

ROSE 1910—Extra early, extra large, rich deep pink with narrow central line on lower petals. Fine forcer and highly popular.

SMILING MAESTRO—Early. Deep salmon-rose. First rate cut-flower.

SONATINE—Medium early. Deep pink, does not crook, an ideal cutter but not a very good shipper.

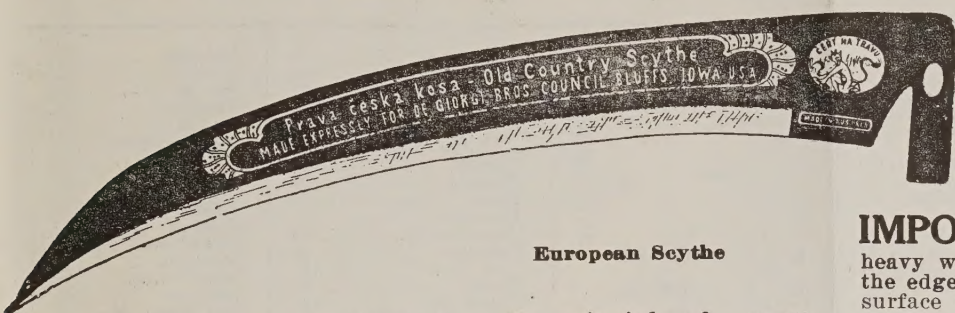
SHIRLEY TEMPLE—Medium early. Flowers ruffled, color cream white with richer throat.

VAGABOND PRINCE—Late. Red-brown with a fiery red mark in the throat. Immensely attractive to most flower lovers.

W. H. PHIPPS—Medium early. In the very best class as to color, size, bulb and cut flower value. La France pink overlaid with light rose-salmon. Lower petals speckled with ruby red. Flowers enormous. A masterpiece.

ARTICHOKE—Culture. Requires rich, heavily manured soil. In the North, plant in a protected position. Sow the seed late in February up to the middle of March in a hot bed, transplant into cold frames and plant in the open when danger of frost is past. Press the dirt FIRMLY to the roots of the seedlings, but never plant them deeper than they stood before transplanting. Artichoke must at no time be allowed to suffer from lack of moisture. One can also sow the seed in the open late in April. From this sowing you will get a crop the following year and then for many years. The plants must be protected over winter with a layer of dirt a foot deep with manure placed on top of this dirt. The dirt must be removed gradually with the approaching spring else the plants are liable to rot over winter. Before dirt is placed on top of the plants, cut the stalks and leaves close to the surface of the ground.

IMPORTED EUROPEAN SCYTHES



European Scythe

Made of finest magnetic steel on the principle of a razor. Blade very thin, back strong. Can be sharpened to such a keen edge that one can almost shave with it. Unbeatable in mowing grass, grain or clover. Usually sharpened by hammering, which sharpens and hardens the edge. Those not knowing how to use the hammer should sharpen the blade on a grindstone. Not strong enough for mowing tough, big weeds or brush. Special prices, in quantities, for parks and cemeteries. All our scythes fit the American or any other kind of handle.

PRICES FOR IMPORTED EUROPEAN SCYTHES

Length	Postpaid each
20 inches	
22 inches	
24 inches	
26 inches	
28 inches	
30 inches	

A COMPLETE SCYTHE including the blade, handle, scythe ring, hammer, anvil and stone for \$5.00, prepaid.

EUROPEAN SCYTHE HANDLE—This is straight, not bent. Each, postpaid,, including ring. Not prepaid,

European scythes will fit the ordinary bent or curved snaths.

EUROPEAN SCYTHE RING

Single Screw Ring.....30c Double Screw Ring.....35c

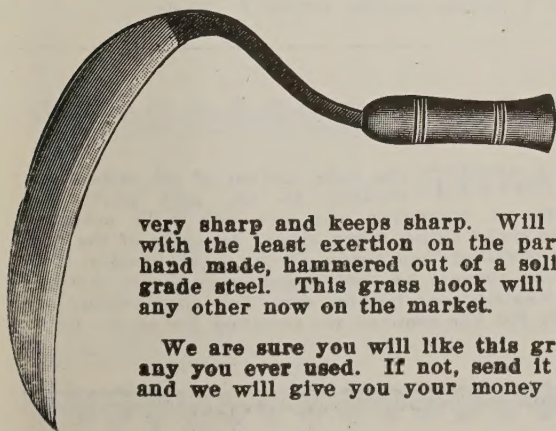
Our imported Scythes are hand made by the mountaineers of Styria in Europe. Scythes, also swords, were made in that part of Europe for centuries. The makers have centuries long experience. The steel used is high grade Styrian magnetic steel and scythes as good, cannot be made on this side and sell for moderate prices. Scythe manufacturers in America tried it and gave up. Prices being high, on account of high duties, will not sell in America. American goods will not sell in Austria as they would if Austrians could sell their excellent scythes here. Both sides are losing.



EUROPEAN GRASS HOOK

These European Grass Hooks or better known as German Grass Hooks are a standard article on the American market. People that know demand them, because they are light and keep the edge better than most other grass hooks.

"LIKE A RAZOR" GRASS HOOK



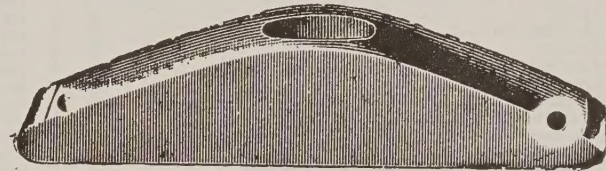
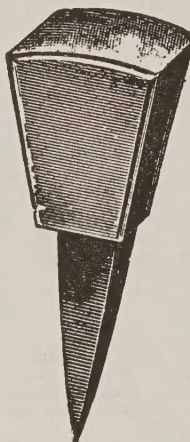
This Grass Hook, like a razor, has a strong back and extremely thin blade, very sharp and keeps sharp. Will cut grass and weeds with the least exertion on the part of the user. It is hand made, hammered out of a solid piece of very high grade steel. This grass hook will do better work than any other now on the market.

We are sure you will like this grass hook better than any you ever used. If not, send it back at our expense and we will give you your money back.

Dealers and Jobbers Write for quantity prices. We carry large stocks and can take care of sizeable orders at any time.

ALLIGATOR SICKLE—Best sickle to cut corn stalks and brush. Has a toothed edge and must be sharpened with a stone or file on the reverse side. Each 75c, dozen \$7.80 prepaid.

IMPORTED BUSH SCYTHE A practically unbreakable scythe for cutting heavy weeds and brush. Sharpened by hammering; by drawing out the edge to the thinness of a razor, easy to cut with. On fairly level surface cuts the weeds, brush, or grass flush with the ground. We recommend this scythe only to those that know how to sharpen a scythe with a hammer.



HAMMERS AND ANVILS

Hammering draws out and hardens the edge of the scythe and the scythe stays sharp for a much longer time than it would if it was sharpened by the whetstone alone. Price:

Bleeding Heart

DIELYTHRA SPECTABILIS—Readily saleable, absolutely hardy, easy to grow, fast to multiply, always in demand, a money making article for the flower grower. You can sell the roots simply divided or if you will pot them up (4 inch pots) early in February, place in a greenhouse (temperature not over 55 deg.) you will have blooming plants for spring sales. Started early in January will be ready for Easter and no matter when you will have them they sell at a good price. Dig roots intended for forcing late in October or early in November, store in frames until February, then pot them up and water heavily AFTER they start into growth.

Strong divisions with several eyes. 12 for \$3.00; 100 for \$23.00, not prepaid.

HOW TO FORCE GLADIOLI

Pot the bulbs, using 2 inch pots and ordinary soil, place the pots under the benches. When the pots are filled with roots move them into a temperature of 45 to 50 degrees at night. NOT over that, and when established only 5 degrees of heat can be applied with safety. Too much heat causes the tips of leaves to turn yellow and in some cases blindness. Water cautiously up to the stage when buds begin to form, then give plenty of water and once a week liquid manure. NEVER plant before January 15th, as earlier plantings will result in blindness. Plant in solid ground in rows 8 inches apart, 3 1/2 inches apart in rows, 3 inches deep and if on benches have at least 5 inches of soil in them and do not use strong bottom heat. If your soil is too rich the growth will be rank but there will be no bloom. Only first size bulbs are suited for forcing and a bulb once forced is of no value for forcing even if grown outdoors for two seasons. Keep your bulbs dry, in shallow trays in a temperature of 40 to 50 degrees. If bulbs are left in deep layers they soon heat and form roots which weakens the bulbs. It is easy to grow Gladioli under glass and you will never fail if you will not force them hard, never plant before January 15th, do not plant shallow and never use bulbs once forced. **CULTURE OUTDOORS:** Spade the ground about a foot deep, never use fresh manure and do not plant them in the same place where planted the previous year. Early in May press the bulbs about 4 inches deep into soft ground in rows a foot apart and 6 inches apart in the rows. Keep free from weeds. To bring them to perfection apply all the water they can stand from the time they are 8 inches high until they commence to bloom.

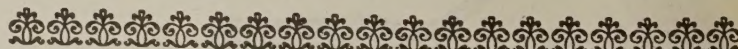
BECAUSE OF THE WAR

we are unable to import scythes, sickles or in fact anything whether it be manufactured products or seeds, from Europe.

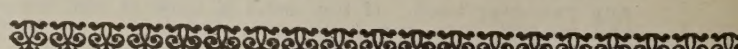
We still have a small quantity of articles for which prices are quoted. Where no price is given it means that we are entirely sold out. Please order only such articles for which the price is quoted.

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WE GUARANTEE the safe arrival of all orders en-
our seeds. Inform us whenever you are not fully satisfied
and we will do the right thing every time. In spite of the fact
that we send out nothing but seeds of the best quality it is
impossible to assure success as that depends on many circum-
stances such as weather conditions, etc., for that reason we
shall be liable only for the amount we received for seeds, bulbs
and plants.

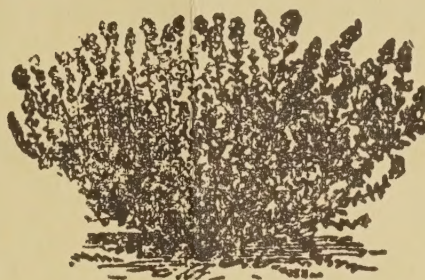




Marjoram

Four Popular Herbs

Sweet Marjoram, Sage, Summer Savory and Thyme.



Thyme



Sage

Kitchen Herbs

Most herbs should be cut when in full bloom, dried quickly in shade and when thoroughly dry packed in boxes with the air entirely excluded. The seed of most varieties is small and delicate, therefore it should be sown in finely prepared soil, free from weeds, to secure a satisfactory stand.

BASIL is an annual plant, strongly fragrant, in all its parts, grown by some for its perfume, by others as a kitchen herb and sometimes as a medicinal herb. Dwarf Basil grown in pots makes a fine house plant, emitting a pleasant perfume when its leaves are touched by hand, it grows in symmetrical compact bushes about 6 inches high. Sweet Basil is grown as an ornamental plant. Lettuce Leaved Basil is used as "greens" by many people. The two last named varieties grow a foot high. Basil should be planted out-doors when all danger of frost is past in rich soil and in a sunny situation and should be spaced 3 inches apart.

SWEET BASIL—Pkt. 10c; oz. 45c.

DWARF BASIL—Pkt. 10c; oz. 60c.

LETTUCE LEAVED BASIL—Pkt. 10c; oz. 45c.

BOHNENKRAUT—See summer Savory.

BORAGE—Leaves are used in pickles and salads; flowers excellent for bees.

CARAWAY—Used in flavoring liquors, breads, meats, etc.

DILL—The green leaves are used for pickles and for flavoring sauces. Pkt. 10c; oz. 15c; ¼ lb. 30c; 1 lb. \$1.20.

MAW OR BLUE POPPY—The seed is used in pastries.

SWEET MARJORAM— MAGGIORANA

(Marjanka). An annual kitchen herb with a very pleasant smell much used in soups and various dishes as seasoning. Sow the seed outdoors when all danger of frost is past, in rows foot apart. Height 9 inches.

MINT—Plants only. Per clump, 25c postpaid. Two varieties, Spearmint and Peppermint. 100 plants 75c; 1,000 plants, \$5.00, not prepaid.

ROSEMARY—Yields an aromatic oil and water.

SAGE—Broad leaved. Leaves are used for seasoning and stuffing. Pkt. 15c.

SAVORY SUMMER—A culinary herb.

TARRAGON—Estragon (*Artemisia Dracunculus*). Hardy perennial with slight protection over winter. Very aromatic. Plants only. The true variety yields no seed. Three for 85c, 12 for \$2.80, postpaid.

THYME—Dymian Timo o Pepolino

A hardy perennial kitchen herb, once planted lasts for years. The dried leaves have a very pleasant scent. Height 3 inches. Pkt. 10c.

WALDMEISTER—Used in May vine and also for scenting clothes.

WORMWOOD—Has medicinal qualities. Beneficial for poultry, and should be planted in poultry yards.

YARROW—Has medicinal qualities.

RUSSIAN SUNFLOWER

Produces enormous heads, measuring 15 to 20 inches in diameter. Will yield under favorable conditions, forty to sixty bushels to the acre. It is highly recommended for poultry, and the best egg producing food known. May be planted on a waste piece of ground any time from early spring until middle of July, at the rate of 3 lbs. to the acre. The thick stalks may be used for fuel. Price: 1 lb. postpaid, 30c; packet, 10c. By freight, your expense, 10 lb. lots and over, at 20c per lb.; 100 lbs. \$18.00.

TOBACCO

CULTURE—Is not particular as to kind of soil. In the North sow the seed in March and plant in rows 3½ ft. apart and 3 ft. apart in the row when all danger of frost is past. Cultivate frequently.

BONANZA—About the best variety in the long list of Tobaccos suitable for light soils on which it makes high bright brown leaf and on heavy soils it makes fine leaves of mahogany brown. Leaves broad, set well apart on the stem. Is easily cured, of fine quality and makes first-class product either for wrappers, filling, or as a chewing tobacco. Pkt. 10c; oz. 50c; lb. \$4.00.

TREE SEEDS

Sow Evergreen seeds early in the spring in a firm, sandy bed. Give the young seedlings some shade the first summer. The other deciduous seeds can be sown in April or May in drills 3 feet apart.

	Pkt.	Oz.	1 lb.
ARBOR VITAE AMERICAN.....	\$		
AUSTRIAN PINE			
BARBERRY THUNBERGI, (Jap.)..	.10	.20	2.20
COLORADO BLUE SPRUCE.....	.10	.40	6.00
MULBERRY RUSSIAN .....	.10	.30	3.00
SPRUCE NORWAY .....			..

CARAGANA ARBORESCENS A shrub with ornamental fern like foliage and bright yellow flowers in May and June. Easily raised from seed hardy everywhere. Germinates promptly. Pkt. 10c; oz. 45c; lb. \$2.25.

CORNUS KOUSA

Who knows *Cornus Kousa*? Very few, yet it deserves the widest use because it is a beautiful and extremely showy shrub blooming in June a month after *Cornus Florida*. Its fruit is pinkish round balls nearly an inch in diameter making the shrub as ornamental as when in full bloom. Does well in any soil and situation including shaded places under big trees. Hardy, easily raised from seed grown in the spring or fall. Height 10-20 ft.

ELEAGNUS LONGIPES

Valuable shrub because highly ornamental and easily and inexpensively raised from seed. Flowers fragrant, yellowish white in May, followed by bright red, edible cherry like fruit that hangs in bunches from the branches. Foliage silvery white. Perfectly hardy. Height 5-6 ft.

DAMPING OFF—To prevent damage from the damping off disease use one teaspoon full of vinegar in a pint of water. Or 1 level teaspoon of epsom salts dissolved in a pint of water. Watch your seedlings and apply the remedy promptly.

Vegetable Varieties OF SPECIAL MERIT

Some of the items to which we are calling your special attention are new varieties and some are not. All possess great merit and you will make no mistake giving these varieties a trial.

PEPPER 16 TO 1 and Pepper Early Pimento.

CABBAGE EARLY MARVEL—The earliest cabbage producing heads of medium to large size.

CABBAGE DELUX—Medium early and the most profitable and dependable in the corn belt.

CABBAGE SPECIAL HOLLANDER—We have a remarkably pure strain that you should try if you grow late cabbage.

CELERY CRISP HEART—An extra early easily blanched "green" celery.

TOMATO SUPREME MARGLOBE—Grow this together with regular Marglobe to see that this special strain of Marglobe is way ahead in quality and a profit producer for the grower.

TOMATO SUPREME GULF STATE—The most uniform and perfect strain in existence. If you grow pink tomatoes give our strain a trial.

TOMATO 100%—Read the description.

TOMATO MARVELOUS PINK GLOBE—There is nothing as good in LARGE fruited pink tomatoes than our Marvelous Pink Globe.

HYBRID SWEET CORN—Possesses quality and produces much heavier crops than regular Sweet Corn. As yet the seed is rather expensive.

ONION WHITE BUNCHING—Very quick growing onion for bunching. All who tried this variety made good money.

Noteworthy Flowers NEW AND OLD

Some of the flowers mentioned below are nothing new. Though old they are unknown to many. For that reason we call special attention to them. Because known only to a small number of the flower loving public they will prove of equal value as novelties if exposed to public view in blooming stage.

As a grower what is of importance to you is increase in sales. We cannot see where it makes any difference whether you will effect more sales by offering novelties or by offering forgotten or unjustly overlooked old flowers. These old flowers now undeservedly neglected by both professionals and amateurs will be found equally as good or even better sellers than some of the novelties.

ACONITUM—If you sell cut flowers it will pay you to work up a stock of Aconitum. The flowers come in many shades of blue, are as attractive as Delphinium and if you will plant the three varieties listed by us you will be able to cut from May to frost. Start the seed in January in a flat placed in a cold frame, or you may sow in the open late in the fall. It takes 2 to 3 years from date of sowing to blooming size plants. Aconitum requires heavy soil and some shade during the hottest part of the summer.

CAMPANULA GLOMERATA SUPERBA—One of the choicest cut flowers, heat and drought resistant and easy to raise from seed.

CARNATION GIANT OF PRAGUE—Just as easily sold as it is easy to raise. Read the description.

CENTAUREA AMERICANA—Ranks very high as a cut flower. It must be cut just when it begins to open when it will gradually open to full size and retain elegant form for days after cutting.

DIANTHUS WINTERI—A beauty that can be turned into cash when in pots on Mother's Day as well as through the spring months and again in the Fall.

DIANTHUS DELTOIDES—Will grow under conditions hardly any other plant could endure save cactus. The dark green shiny foliage forms neat cushions and above this fine leaved highly ornamental cushion of foliage is a sheet of lustrous crimson bloom from May to August and again late in fall if the stalks are cut. A self selling plant easily and inexpensively raised.

DORONICUM—Furnishes a wealth of bloom, highly valuable to the florist, in April and May. Potted plants in bloom self at sight.

ASPARAGUS VEIL OF LACE—hardy perennial asparagus, producing in the open quantities of as valuable material for the florist as does Asparagus Sprengeri.

CLEMATIS MANDSHURICA—Hardy upright growing kind producing first class flowers for flower work.

YOU ARE MISSING a chance to make some extra money if you are not raising *Lilium Tenuifolium* in quantity. *Tenuifolium* is a beauty and no lily is easier to raise. There will be a big demand for this Lily as soon as it will be better known. The seed will produce at least 2000 salable size bulbs per standard cold frame (6x3 ft.) in one year. From an ounce of seed you will raise at least 4000 bulbs. Try this: Pot up a few bulbs of *Tenuifolium* and expose these to public view. If you'll do this you will sow plenty of *Tenuifolium* after seeing what a self-selling flower is *Lily Tenuifolium*.

DWARF PHLOX—One of the showiest of which immense quantities of plants can be and will be sold when dwarf phlox will be better known. Have good supply of plants on hand and try some of the Cecily strain of Dwarf Phlox.

PENTSTEMON GRANDIFLORUS—Is a flower of great beauty as effective and valuable for cutting as *Gladioli*. If not allowed to suffer by lack of moisture produces spikes 5 feet tall with extra large individual flowers.

STOCK GIANT WONDER—Is a wonder among forcing stocks. It is a strain that brings best results in dollars and cents.

SWEET WILLIAM BLACK PRINCESS—An old flower yet a new flower. How so? Almost every visitor that sees our bed of Black Princess buys a few plants. These visitors have never before seen the black-red flower. The color compels attention. Try this: Pot up a quantity of Black Princess. Sink the pots in the ground where it will be seen by passersby if you want to sell during May up to August when this plant is in bloom.

You will miss a LOT if you are growing tomatoes for the market and if you will not grow

Tomato Firesteel

FIRESTEEL is a heat and drought resisting variety.

FIRESTEEL produces a BIG crop of tomatoes when other varieties fail.

FIRESTEEL produces extra large tomatoes and is EXTRA EARLY.

FIRESTEEL is a tomato of high quality.

FIRESTEEL does well in all parts of the country.

FIRESTEEL keeps on setting and producing fruit till frost.

FIRESTEEL is the king of all scarlet fruited tomatoes.

For description see Page 2 of this catalog.